

TRANSCRIPT

NEWSWEEK PANEL DISCUSSION, FEBRUARY 26, 2008

TONY EMERSON: Good afternoon, everybody.

[INAUDIBLE] Good afternoon. I'm Tony Emerson, I'm managing editor of Newsweek International. I'd like to welcome you all to a very timely Newsweek Executive Forum. I'm thrilled to be here myself. We have a great panel. Newsweek and her new advertising partner API are pleased to present an Issues 2008 Panel Discussion on Globalization Trends and Energy and the Growing Competition for Resources.

Newsweek has committed extensive resources over the last year to covering the environment and energy and obviously will continue to do so for the foreseeable future because energy is going to remain hot for the foreseeable future. Our International Edition published a special issue on the future of energy that was distributed in 2007 at Davos. Last April, Newsweek followed up with a cover on environmental leadership which coincided with our inaugural global environment in leadership conference at Georgetown University. Our keynote speaker there was Arnold Schwarzenegger. You may have noticed him, his picture smiling at you from our cover, as you entered the meeting room today.

This year, New York Mayor Michael Bloomberg will serve as Newsweek's keynote speaker for the second inaugural global environment and leadership conference, also at Georgetown this time on Tuesday, April 8th. We invite all of you to attend and contact information is available in the back of your program cards.

You should have received a program notepaper and pen at your seat. We encourage you to write down questions. We'll collect them during the program and we'll have a segment for audience questions at the end of the panel. One quick request, please turn off all cellphones, beepers, and other annoying communication devices. Now, [CELLPHONE RINGS] [LAUGHTER] I'm honored -- : Right on cue.

EMERSON: I'm honored to be moderating this discussion partly because the audience is so impressive. I've had a chance to see your credentials on the guest list and I know with credentials like yours, what drew you here today was the very impressive credentials of our panel. Their bios are in your program so I'll just introduce them very briefly and we can get straight into their opening remarks. Red Cavaney is President and CEO of the American Petroleum Institute with over 25 years of industry experience on issues dealing with energy and environment. He's also a former senior White House staff member under Presidents Reagan and Ford and Nixon.

Karen Alderman Harbert is in the pink -- I'm out of order here -- is the former Assistant Secretary for Policy and International Affairs at the U.S. Department of Energy. I should recently former. I believe Friday was her last day with the administration. Next week she begins a new job as executive vice president and managing director of the Institute for 21st Century Energy at the United States Chamber of Commerce.

Our own Rana Foroohar is Newsweek International Senior Editor for Business, a former lead writer for international business affairs and now also runs the economic coverage in our Annual Davos Special

Issue. And finally, Robert Hormats is Vice Chairman of Goldman Sachs International, a former high-ranking official in the State Department and on the National Security Council and a prolific author, most recently of "The Price of Liberty, Paying for America's Wars."

A welcome to all of you on the panel and all of these speakers have very different takes on globalization and energy trends. I'd like to start with Red, who's going to give us a little brief from the oil industry perspective on just how much the oil industry has changed in recent decades. Red?

RED CAVANEY: Thank you, Tony, and thank you all. Thank you to my colleagues here on the panel. It looks like a very interesting afternoon. Today is certainly not your father's energy world. What may not yet be clear to many policymakers and the general public is that the oil and natural gas portion of the energy world is dramatically different from the last time we encountered price volatility like what we've seen in the last few years. This was in the mid-1970s and the early 1980s. Back then those spikes were due principally to restrictions on supply. Now volatility is driven more by surging demand especially from the emerging economies around the globe.

Since the 1970s, there's been a global shift in the ownership of oil and natural gas reserves, away from the investor-owned companies based principally in the United States to the national oil companies who have taken custodial ownership of the oil reserves on behalf of their foreign governments. Those governments and those oil companies also have other claims on their national treasuries and many of these foreign governments have in my estimation under-invested in future production capacity. Why should we worry? Well, this is significant because these governments control 80 percent of the known reserves in the world today.

With demand pressures continuing including those within the U.S. itself, the IEA, the International Energy Agency, projects a 55 percent increase in global energy demand through 2030. It's important that we recognize that our nation and the investor-owned oil and gas companies are in a very tough competition for hydrocarbons with the national oil companies in the global marketplace. Investor-owned oil and natural gas companies, IOCs if you will, understand that this dynamic has changed from the way it was many years ago when they owned all the reserves, and they're committed to doing all they can to create the value proposition to ensure they can bring energy home to the U.S.

I know many of you in this audience obviously recognize these realities. Unfortunately many in Washington, DC do not. We must shun their cries for so-called energy independence. These calls are symptomatic of increased protectionist sentiment in our country.

That isolation is no more a solution to U.S. energy problems in the 21st Century than it was to America's critical role in the world in the 20th Century.

Energy isolation invites potentially incalculable economic and security risks for the future. Our nation needs an energy policy that reflects today's global energy market. And if we fail to recognize how our world has changed, our nation is going to be extraordinarily challenged to meet its future and I want to underline strategic needs, whether they are energy, economic or national security.

So rather than have U.S. policymakers as they are wont to do, to strike punitively at the investor-owned oil companies rendering them less capable of competing in the global marketplace in order to provide the oil and natural gas that U.S. consumers demand, our nation needs a public policy framework that ensures our ability to attain the level of energy security that the country needs.

We need in order to have that energy security, a greater commitment to increased energy efficacy. We also need to diversify our energy resources, drawing on the full range of those sources, including all of the alternatives that prove to be competitive.

We also need to increase and diversify our sources of oil and natural gas supplies both within this country and abroad and finally, we need to further enhance our energy technologies, remaining at the cutting edge of advanced technology.

If our nation is to achieve energy security, maintain its economic competitiveness and continue increasing our standard of living, we can no longer give aid and comfort to those who would mislead us with erroneous rhetoric and the promise of quick fixes. Our nation needs a well reasoned, comprehensive national energy strategy that recognizes how the world of energy has changed.

Thank you very much.

EMERSON: Thank you Red. Your remarks about the policy implications of the current oil markets lead naturally into Karen Harbert's remarks which are focused on how current market and prices are changing national security calculations as they relate to energy. Karen?

KAREN ALDERMAN HARBERT: From red to pink.

: Yes.

: There you go.

HARBERT: Thank you, and it's a pleasure to be here on my first day of unemployment which will last all of four days. You know it's time to confront a new energy reality as Red has said, and I would argue that we are facing a level of energy insecurity that now poses an unacceptable level of risk to our national economic security. Energy security is inextricably intertwined with our national and economic security.

No one industry and no one country is the problem or the solution. So what are the actual facts right now out in the market? As Red said, energy demand is going to go up by over 50 percent between now and 2030. About 70 percent of that is going to happen in the developing world who is experiencing tremendous economic growth which we are in favor of but which will further strain our energy supply chain.

Electricity growth is going to go up by 100 percent over the next 25 years, and yet in the world today we have 1.6 billion people without access to electricity. China has 30 million cars on the road today and by 2025, they're going to have 300 million cars on the road. What kind of cars are those going to be, that have more cars on the road in 2025 than we have on the road today.

What type of fuel are they going to run on? Who's going to produce those cars and what type of cars are they going to be? And of course we need \$22 trillion just to meet the demand that we know exist today over the next 25 years. Twenty-two trillion dollars of new investment. Is that investment going to materialize and how?

What are the trends out there that are going to actually challenge that investment being made? First of all, as we know most energy is -- and will be still for a long time -- derived from fossil fuels, but they're located in a small number of producing countries around the world. These places are in -- these resources are in places that are geographically hard to get to, geologically very difficult to develop, they're politically unstable and are increasingly hostile to foreign direct investment.

Access to those reserves is limited. Roughly two-thirds of the world's oil and gas reserves are in countries that limit access to foreign direct investment and now the new big behemoth on the market, the national oil companies are close to three-quarters of the world's oil, proven oil reserves. At the same time, energy sector exploration and development costs have gone up dramatically. Some of these companies are experiencing huge cost increases never seen before. All of the inputs to the sector have gone up, whether they be steel, copper, et cetera, and at the same time, we are seeing a huge shortage of the professional capacity, the intellectual capacity, the professional engineers and staff that is needed to actually develop these projects.

So the costs are going up and the people we need to run them are in short supply.

At the same time, while we are seeing upstream investment costs going up, we are seeing more investment going into the upstream but -- sorry Red -- we are seeing more money go into production rather than exploration. Of the monies that a company traditionally puts into exploration production, it used to be 30 percent would go into exploration and 70 percent into production. That now is 11 percent going into explorations. So even in the market in which we find ourselves, with high prices and a growing demand, less exploration is going on around the world, which will further constrain the energy supply chain. And lastly, we're seeing an increased manipulation of natural resources. Countries like Venezuela, Russia, others, are using those resources for their own political, economic, or social gain to the detriment of their citizens and to the detriment of the energy supply cycle. That will certainly over the longterm prove economically unbeneficial to those countries but in the short-term with higher oil prices be able to mast(?) that to their own economies.

So what do we know? We know first of all that lower prices are not on the horizon. We know that small supply disruptions around the world will have an immediate impact on world oil markets on the American consumer. We know that we're going to see more nuclear power because it's emissions-free and there's a resurgence around the world for nuclear power which breeds proliferation or concerns. We know that biofuels is the idea du jour and we have to pay attention to that. We certainly know that coal will be making a comeback which means we have to crack the code on clean coal technology so that countries like India and China, and of course the United States, that are blessed with coal can use it as a domestic and reliable resource.

So is this a bleak picture or is it an opportunity to rechart our future? I'd say rechart our future on four principles and then I'll leave it there. We have to expand our energy production to meet the type of needs of this growing global economy. We want people to grow, be prosperous and have jobs. That's good for our economy. So we want them to have the fuel that it needs to grow their economies. So we have to have more technology. We have to diversify the types of energy we use, where we get it from and how we get it, the roots from which we get it. And that means we also have to be better consumers of energy. More energy efficiency is the next best source of energy. The next best source of energy is the one we currently raise. So we need more energy efficiency.

We need to reduce the environmental burden of energy consumption. Eighty percent of greenhouse gas emissions are due to energy. We have to address that frontally. We have the technologies to do it, and we need to get about it, we need to get about it fast.

Two more things we need to do is we really need to focus on the investment climates for the companies that Red represents, being able to go in and explore and produce the type of energy we need and we need to modernize and protect the global energy infrastructure. We have a decaying global energy infrastructure here in the United States and around the world, and we can no longer afford that. So I would argue we need investment. We need leadership, and we need innovation, and if we don't have those, we're putting at risk our national security, our economic security. Thank you.

EMERSON: Thank you Karen. One of the reasons I'm very excited to be here is that Newsweek International, we try to follow a very disciplined editorial policy of follow the power, follow the money, follow what matters. What's been very interesting about the oil story is that in recent years, it really hasn't mattered until recently. We passed \$40, 50, 60, with no impact on the economy. We had Dan Yergin writing columns for us, sort of a plea, cry in the wilderness, oil still matters, nobody is listening to me!

Now, I think it happened around \$70 or 80, very clearly we're at a point where prices are so high that all kinds of alternative energy has become feasible. The sovereign wealth funds are getting so rich that they're scary. Very clearly, nobody is arguing anymore that oil doesn't matter. Our next speaker, Foroohar, our international business editor, will elaborate a little bit on how \$100 oil has reshaped really many of the stories we do on the economy and business and Newsweek International. Rana?

RANA FOROOHAR: Thanks very much Tony, and thanks for having me here. I think what I'd like to bring to the table today is just a sense of how interconnected energy and energy issues are to pretty much every story we're doing right now, particularly in global economics and business. In preparing for this panel, I went back through some recent issues and looked at our coverage and was struck by how things like oil prices, growing energy consumption, the environment and petro-politics have underscored much of our coverage, and I'll give you just a few recent examples of some stories.

We did a cover, an international cover a week ago about the future of the car, and it was entitled small is big, and as Karen has already talked about, it was all about how the global auto industry is now all about coming up with fuel efficient compact vehicles for these -- this mass of new drivers from the

developing world that's going to take to the roads. Gas costs are rising, the planet is heating up, so that's then having a knock-on effect. Environmentalists getting concerned about all of this.

This burgeoning new middle class which despite all the bad economic news is of course propelling the world to record economic growth has also been the focus of recent covers and in particular they are a big driver behind that 50 percent energy increase that you've been hearing about today.

We have an upcoming piece on mergers & acquisitions in the airline industry. A big driver there is the fact that since 2002, jet fuel expenditure has gone up 237 percent. So that's having a big impact on airline industry profits.

Our reporters in Europe and many parts of the developing world are constantly pitching these stories about how food and fuel inflation are the biggest risk factors in these economies at the moment and as we've heard already, we're beginning to see links between the two. I think Bob is going to elaborate on some of this. There are some nations that are unable to continue with both fuel and food subsidies. That's having a knock-on effect. In some of these cases, people are going hungry. This can have a pushback on globalization which if we think \$100 oil is worrisome, if we start having retrenchment in globalization, I think we have much, much bigger problems to worry about.

The unexpected white knights of course in all of this are the sovereign wealth funds. Every day you hear about a new fund from Asia, the Middle East that's bailing out a new U.S. financial institution and I find the back and forth between these entities quite interesting, who's the most least transparent. I was in Davos recently and people like Larry Summers were calling for more oversight and regulation of these institutions.

On the flip side, you've got kind of a new breed of gray-suited fund managers sitting in places like Abu Dhabi who are looking at the beleaguered balance sheets of the next acquisition target. So that's a big sea change as well. And of course petropolitics is underscoring much of what's in the news. You've got China, Russia, the U.S. duking it out in places like Africa and Central Asia in new sorts of great gains for natural resources.

Newsweek is by no means alone in contemplating any of these issues. As I said, I recently returned from Davos and something that was quite interesting to me was that over a year ago in 2007, there was a panel in Davos, a kind of a sort of out there, edgy panel about \$100 oil, what-if, and a lot of CEO's got together with whiteboards and sort of drew maps and emergency plans and there was sort of a sense of oh, my gosh, we hit \$100, the sky is definitely going to fall, and this year, \$100 is not an emergency, it's the new reality. So I think that with that comes a lot of interesting debate.

One of the titles of the panel I attended in Davos was, "A Dangerous Mix: Nationalism, Natural Resources, and High Expectation." Another was called simply, "Energy: Unsustainable Trends."

I think there was a broad agreement that energy is at the heart of some of the biggest geopolitical shifts of our lifetimes. And I think it's worth mentioning every year at Davos, I'm sure some of you have attended, there's a kind of a country or an entity that takes center stage, and in the past that's been

China or India. I think this year, it was without a doubt the Gulf states and the sovereign wealth funds. Some 81 percent of the audience in one of the panels voted them the most important new power players on the global scene and no wonder because they already control \$8 trillion worth of assets. If trend lines continue as they are, they're going to control another 15 to 20 trillion in the next five years.

One sovereign fund manager actually took it upon himself to remind the group that the recent bailout of Citigroup could be measured in days of oil pumped in the Gulf. So, I think there's still clearly a lot of room for these new entities to exert their force on the global stage.

As I've mentioned, this has triggered a lot of concern in the U.S., in Europe, about greater regulation and transparency, and it's also got some people worried about the sort of protectionism that we don't want to see right now. So in short, I'd say that I see a lot of ending of old paradigms, creation of new alliances. As we've heard, the role of the international oil companies is changing, they're controlling only 20 percent of known reserves. At the same time, the new petropowers themselves are interdependent, which I think is worth remembering. We recently did a piece looking at how Russia and a particular gas problem which is considered the thousand-pound gorilla, natural gas, actually only produces enough natural gas to supply domestic needs. It imports the rest from central Asia.

So these -- and these republics(?) are starting to exert their own controls. So I think all of those are worth thinking about.

I guess I would sum up by saying as others have that it seems that this is a time for reinvention to invest in new technologies, new ideas, and probably consider whole new business paradigms. Thank you.

EMERSON: Thank you Rana. Robert Hormats, as befits his title, Vice Chairman of Goldman Sachs International, will talk about separating some fact from fiction in America's role and place in international energy markets today.

ROBERT HORMATS: Well, thank you very much. A number of the points I was going to make have been very eloquently-made, but let me just try to pull a few of these thoughts together. One of them is that if you look back over the last several decades, the industry underwent major capacity expansion up and through the early part of the 1980s, but certainly in the 1970s when prices went up, people became aware of energy shortages, and we've sort of lived on that capacity expansion for a period of time. Today, we've really exhausted that spare capacity around the world, and we've ended the phase of exploiting already implemented investment, and now the industry has to begin a new investment phase, and I think that is one very important shift.

The second important shift is that a lot of the new available capacity will be not in the traditional economies, the United States or the North Sea, but a lot of it is going to be in countries where the control over the potential increase in capacity is in the hands -- as Red pointed out -- of the national oil companies.

And then the question is how much do they develop their capabilities? Are they utilizing the money that they're making -- and many of them are making a lot of money -- are they putting it back into the ground

to develop new oil, are they using it for a variety of other purposes? And then the question is, how efficiently if they are putting it back into an investment, they are doing it because in some cases they're not allowing some of the internationalists to come in who might be more efficient in the development of that capacity.

So this new investment phase is fraught with a lot of uncertainties and Red makes the point, you go to Washington and people think, well, it's the majors that are dominating this, but in fact, it's a lot of these national oil companies that are going to determine whether this investment phase that we're now in is a phase of very rapid growth or not.

And then the other part of the issue is, that it is more expensive to get a lot of this oil because first of all, as you said, the industry itself is sort of a graying industry in many respects. There are not as many people, the people are expensive, they're tied up on one project, and they can't be so easily moved to another project, and the steel and all of the stuff, you need to build new capacity, new rigs and new pipes and all these things is also very expensive. So you need a higher price to coax out that additional oil that's in the ground to develop the capacity to produce that oil in the ground.

And that's why prices -- another reason prices are going to stay up because you need higher prices to get that marginal investment in some of these areas on-stream, and the market's gone through these periods, these phases, before, and it will go through them again, but you need that price signal to get this production up.

The second point that I wanted to make relates to the question of how this relates to the financial system of the United States.

If you look over the period of time just from the beginning of this century, the year 2000, there's been a transfer to energy-producing countries collectively of \$3 trillion from the oil-using countries, the United States being the biggest, Western Europe being the second, Japan being the third, and a number of others. Three trillion dollars. This is a lot of money which as I say, some of it will go back into oil production but not all of it will, and some of it's going into sovereign wealth funds, some of it's being used for domestic purposes, social purposes, in these countries, and a lot of it is saved. They can't spend it all, they're not spending it all. A lot of it is saved, and then a lot of it, of course, comes back into the United States, not just through sovereign wealth funds. People talk about that a lot, but reserves are much better, bigger, in these countries than the sovereign wealth funds and there's less discussion of that but if you look at the magnitude of sovereign wealth funds and look at the magnitude of reserves, the reserves -- foreign exchange reserves -- are much bigger, and yet that, people tend to get a bit distracted when they focus only on one part of this and that's these funds, just because of the nature of the fact that they're new and they operate somewhat differently from the normal management of foreign exchange reserves.

But the fact is that there's a tendency I think to sort of look at the world, and I think the word paradigm that you use, Rana, is very interesting -- the new paradigm -- because that's really what we're in today, and I think it's not fully understood in this country how dependent we are on the rest of the world for a variety of things and how that needs to shape the way we develop policy. We're clearly dependent on

the rest of the world for, was it, sixty-plus percent of our oil? Sixty. Whereas when Jimmy Carter said reducing oil dependence was the moral equivalent of war -- sort of an odd statement but what he said.

But -- that was the Jimmy Carter administration. We were thirty percent dependent on imported oil. Now we're sixty percent plus dependent on imported oil.

And we're also in part as a consequence of our dependence on oil, in part as a consequence of the very low savings rate we have in this country, and part as a consequence of the fact that we borrow very heavily to consume, we're very dependent also on foreign capital, and that is something that I think again is a new paradigm in that it used to be when a country got into trouble, it called the IMF, the IMF would write a check if these countries did the kind of things the IMF wanted.

You don't do that any more. What do you do? You have these countries that have three trillion dollars that they've accumulated and then China that has an additional sum of money -- this is only oil producers, three trillion. China has additional amounts as a result of exports. South Korea, Hong Kong, Singapore -- many of these countries are not even oil exporting countries. They have a very substantial sum of money.

So it used to be that the West had the power because it wasn't so dependent on the rest of the world and it had all the capital that the world needed. It gave a lot of influence. The fact is now under the new paradigm, the marginal capital and large sums of it, come from a variety of countries not the United States and not Western Europe. That gives these countries a great deal more influence over the system.

Even if they didn't have sovereign wealth funds, they would have that influence because of the availability of capital. So that's really another new paradigm. And I'd just like to close on a policy-related issue and that is, there's sort of a notion around we can call the shots and the global trade negotiations and global finance and all these things. Well, not any more. And the answer, the reason is because of our dependence and the fact that other countries have developed a lot of wealth and a lot of commercial capability and a lot of financial strength.

And if Americans are uneasy, as many Americans are about dependence on oil and dependence on foreign capital, and you hear this in various aspects of this current campaign, but well before that also, then we have it in our control potentially but not with the policies we're pursuing yet to reduce it. How do we want to -- how do you reduce it? You reduce it by increasing the domestic savings rate. You reduce it by reducing the degree to which people borrow to consume which has been enormous. Just to give you one number, between mid-2005 and mid-2006, Americans borrowed against the value of their homes \$1 trillion and spent that money. A trillion dollars. We have a 13-plus trillion dollar economy. A trillion dollars. And we call it mortgage equity withdrawal but essentially that's what it is.

[LAUGHTER]

So -- so you reduce depen -- you reduce borrowing for consumption, and you go on a major -- make a major effort to reduce energy dependence which means more efficiency and developing other capabilities that we have here. But independence is not possible in the energy area. So you can't just do

that. You have to work with other countries to help them utilize their oil more efficiently and other energy sources and help them to develop their capacity in other areas more efficiently, in an environmentally friendly way, and I just got back from South Africa and they've had, some of you may know, what they call energy shedding which we would call brownouts. But basically what's happened is, in the face of this, many of these people are reducing their use of electricity very dramatically.

And if Americans understood the ways they can do it individually, it's not going to change things dramatically, but it can help at the margin. You turn the light off when you out of the room -- things of that sort. So it's all things, there are things that can be done. But we're really not of that mindset yet, and \$100 doesn't seem to have shocked us very much yet.

EMERSON: Thanks a lot, Bob. One thing that has fascinated us in covering the oil industry in recent years and it's reflected in many of the remarks here, is the sense of a beleaguered giant. The public view is of, still, of Exxon-Mobil as the big, bad company, whereas if you speak to Exxon-Mobil executives, they feel like they're getting clobbered, costs are rising, they can't get into places. Many of you addressed the issues of -- key issue of raising production and supply -- but what we've heard from oil companies, almost across the board in recent years, is basically, look, we got burned the last time. After the spikes of the '70s and '80s, we spent big, we got burned. We're not going to do it again.

Red, let me ask you to address that first. Is that mindset changing? Is there a feeling that, hey, \$100 oil, we can start spending some money.

CAVANEY: I think the thing that has genesis in the way we've become so dependent, as Bob was pointing out, on capital, and performance against investment becomes the mantra and you see -- if you go back and look at that previous period, I'm going to overstate for the purposes of illustration, literally money was thrown at the wall because we needed to bring on energy any way we could and get it there and then what happens is a huge negative tax regime landed on top of the industry after they spent the money. The bottom fell out and that's why the industry sort of disappeared.

What they're doing now -- this is why you see buybacks and other things occurring -- is they're exercising tremendous financial discipline while at the same time trying to get more resources. So you have one door being closed which is a lot of these national oil companies and foreign governments not permitting to come in and make investment. In our own lands here, 85 percent of offshore continental shelf waters that are available for exploration are off-limits to the industry and for all effective purposes, 75 percent of the on-land amounts. So they've got no place to go, but this money is coming in, and so that's why you see things getting returned.

So it's more a concern about how do I keep myself as an attractive investment vehicle because as has been pointed out by almost every speaker here, that energy is going to be needed and it's going to have to be done by people who have the expertise and get it cost-effectively.

So we've gotten a lot of hits for companies giving money back to buy back their shares, but in truth of the fact if you look at the oil and gas industry, we're about a little less than half of what the all industry average is. It's a practice that's done when there are not other alternatives available to you or you get a

windfall. I would say what's happened is the paradigm was produce energy at any cost back in the 1970s, and now it's make sure you can say capital competitive while you produce energy here now.

EMERSON: Another aspect of that explanation that we've heard from oil companies is that we didn't spend the money because it's Wall Street's fault. Wall Street still values oil at \$22 to 28 a barrel. So we can't spend heavily on exploration in remote areas until Wall Street analysts see the handwriting on the walls and adapt to the new price environment.

That's a natural question for Bob Hormats. Was it Wall Street's fault?

[LAUGHTER]

HORMATS: Well, I'll tell you -- I'll tell you that's an interesting question. One of the things that's happened in the way the markets look at this now is that it used to be -- I wish I had graphs to show this -- but it used to be that when you had an oil spike, the current price would be X-whatever the price was at that point but the five-year futures or the three-year futures and the 10-year futures would be down.

So Wall Street was in effect signaling, well, this price is going to stay up for a little while but in the end, sometime in the future will be a lot lower. So it gave different -- the market gave different price signals. Not so any more.

If you look at what they call elongated oil prices, which are essentially the notion of what the market is telling you prices are likely to be some years out -- three, five, 10 -- whatever the particular instrument -- those are very high now. So the market in effect is saying prices are not going to go down and they're saying -- and the market is also saying in effect that they're not going to go down because to coax that marginal barrel and marginal alternative -- not necessarily a barrel of oil but could be solar power or wind power or whatever power it is -- out you're going to need a higher price and therefore, if the price -- if you don't keep those higher prices in effect you won't get the supply needed to meet the growing demand.

So the market signals coming out of Wall Street are very, very different from what they were in the past.

It's very interesting. I was in California, a little place called Indian Wells, I don't know if any of you have been there but it's near L.A -- not near, two-and-a-half hours -- but if you go along, there are these huge wind farms. Huge -- mile after mile after mile. These are not small. This is sort of Texas-styled, instead of seeing oil production [rigs], these big windmills. And you need a certain amount to get that investment put in the ground, and I think Wall Street signals now and the market signals and the futures market and ... market is in fact saying prices are going to stay up, and I think this conveys signals that are very different from those that you just described earlier.

EMERSON: Let's shift to production from abroad for a second, not our private oil companies, but the state oil companies. Very dangerous to sum up the conventional wisdom, particularly in front of an expert crowd, but I think it's fair to say that the general consensus is that Russia and Venezuela for example are completely screwing up and not reinvesting at an appropriate rate. I think I may have

gotten that one right from reaction. We hear very different things about the Middle East, which seems to be more opaque in this regard. The people arguing that this time is different.

They're not squirreling the billions away in Swiss bank accounts. They are reinvesting not only in oil but in diversifying their economies.

I'll just throw that out to the panel as a whole. Do any of you have a strong feeling about that? Have you seen evidence that the Middle East is making the right moves or not?

HARBERT: Just a couple of words on that, I think the answer is yes, but it's mixed. I don't think you can have a blanket yes to all countries. Certainly Saudi Arabia has made a commitment to greatly expand its capacity. But it hasn't done so in quite a long time, so it's greatly-needed. They are putting their money in. They're going to be missing their production targets a little bit and that's because they are subject to the same type of constraints in the system that everybody else is in terms of rigs are in short supply, et cetera.

So they are being subject to the same thing as the IOCs are, but I think we are seeing some investment in the Middle East, but as you point out, investment is not happening in other places. So while we are seeing some good things happen in the Middle East, they're also by the way in the Middle East, the third largest growing region in terms of energy demand.

So it's not just for export. They have huge new demands in terms of energy consumption in the Middle East.

So they are doing it to also meet their own domestic capacity demands, but if you look at, as you said, Russia, Venezuela, and others, in this market with the next marginal barrel of oil is so important, these are huge lost opportunities that are going to be -- that they're going to pay for, for a long time, for not making those investments now.

EMERSON: Can you --

HORMATS: Can I just add one thing in return. I think it's very important. The Middle East consumption of oil is about the same as China.

HARBERT: Yes.

HORMATS: Think about that. We talked about China, but Karen's point is a very important one. They're using a lot of the stuff at home, in part because it's priced at non-market prices, but nonetheless they're using it and it's not inconsequential. It's very consequential in the overall demand.

CAVANEY: Another point, Tony. The other thing that we're seeing a lot of is these Middle Eastern countries are recognizing that the age of oil isn't going to go on forever and they see Saudi Arabia as a classic example of trying to put together world-class infrastructure in the petrochemical side of the business and all the downstream assets that roll in there, what Qatar is doing and a bunch of the

others. So there's a lot of things that are moving it along but a lot of these things will be absorbed domestically rather than finding their way abroad.

But I do think the encouraging thing we've seen with Saudi Arabia in particular is they are in the downstream sector, at least they're working with the IOCs, they're building refineries for export and a lot of things like this which will be very good evidence but it's not happening as much as we would like, as was mentioned in places outside of the Middle East.

FEMALE: Just an interesting statistic there to add on Red's point about them seeing over the horizon of oil. Between the UAE and Saudi Arabia combined, over the next 10 years they're putting in \$37 billion into renewable alternative technologies, and that is domestic -- they're trying to develop their domestic capacity to do that, so they're trying to see over and around the corner.

EMERSON: The Saudis have defended themselves very aggressively against charges that they're not investing enough or not doing enough to relieve the current price situation by saying it's speculators. Blame it on the speculators, and I imagine some of you out there may be the target of that. [LAUGHTER]

The -- Karen is a recently former administration official, can you talk to us a little bit about what the Saudis tell you in private? Are they very comfortable with \$100 oil or higher? Do they have a price target in mind?

HARBERT: Karen Harbert unbridled. [LAUGHTER] Just a word about your first hypothesis. You know the high prices are a function of the market. There is very razor-thin margins between supply and demand and as we have that type of market, speculators, as good speculators, we will take advantage of that and increase the volatility, increase the spikes in the market where you win and lose depending on how you've hedged your bets.

So we see speculators as a symptom of the tight market, not as causing the tight market.

The Saudis believe exactly the opposite to the core of their souls. They believe that they are the victim of speculators in the market and that there is not such a tight market, that there is a glut in the market, there is excess capacity. The only part of that is true is that there is some spare capacity in the market in Saudi Arabia of the type of oil that nobody wants to use.

And so while you can get away with saying that, in truth it doesn't bear out in the marketplace. So they believe that for the time being that supply is where it should be. They believe that there is going to be a little bit of an economic downturn in the United States, whether it's because of -- it's certainly not because of high oil prices, it's because of our mortgage crisis -- and that they need to hedge their bets and they certainly aren't going to increase production at this point, and if anything, as they get towards the driving season, if they don't see anything to tell them otherwise, they might even decrease production because they're looking at the third quarter of this year.

In the third quarter of this year, there is some non-OPEC supply that's going to come on. That was supposed to have already been brought on the market, and so they're looking a little bit downwards and

so if they want to take advantage of that new supply, they reduce their own production to keep the prices up.

EMERSON: That scenario reminds me of another aspect of the current scene that seems to raise a red flag which is right now, you don't hear -- well, we can find them if we really look for the unconventional view -- but nobody is saying prices are going down. Overwhelmingly the view is high prices for the foreseeable future.

Do any of you see contra-scenario under which prices drop with a reasonably significant amount?

[PAUSE]

Good answer.

[LAUGHTER]

FEMALE: It look at -- in my view, I don't know the answer to that question at all, but I think it's worth noticing that a lot of people would -- that that would be the worst-case scenario for some people right now, that we'd have a huge price decrease because I think what's fueling investment in technology is the prices are high. So I think that that's something worth talking about.

EMERSON: Just, if you follow the old rule that when everybody is saying the same thing, it's time for a shift. Now seems like one of those moments, but another aspect of this is the huge amount of money, let's shift to alternative supplies for a second, \$100 oil makes lots of things possible. Billions of dollars pouring into biofuels. You mentioned the wind farms. You know Vinod Khosla, the big California VC, going before Congress to talk up biofuels -- he's now big into biofuels -- is there a bubble aspect to green energy investment?

HARBERT: I'll go next. You've got the money, I've got the policy. So, let's see --

HORMATS: Is there a -- I wouldn't put it that way. I mean I think that some will be very productive and the innovation that's going on is remarkable, breathtaking. We were just talking a little earlier about a little new device that is a fuel cell to power up blackberries and things, where Bob -- where are you sitting? Oh, there he is. Show your -- put your -- show your little machine. Anyway, but the -- there it is. That little machine. What is it?

: It's a commercial fuel cell.

HORMATS: Right.

: Actually, ...

HORMATS: Give you a plug. But the innovation that's going on is remarkable and in some cases just like the dot-com thing, and I don't want to make too close an analogy but the dot-com period, there were some companies that were spectacular successes and some that were spectacular failures. And my guess is we'll see very much the same thing but I think there is a general view first of all that prices are

going to stay up. The market is in effect telling you. Second, you're not seeing demand destruction at \$100 or at least not very much so the market is absorbing these prices -- in some cases absorbing because the price is subsidized, not here, but in some other countries, and also there's going to be more and more environmental pressure to come up with new ways of producing energy that doesn't involve hydrocarbons, and then there's also a national security issue that if somehow there's a disruption somewhere, at least anywhere else, it could be by accident or it could be by manmade terrorism -- it could be anything -- people are again going to say, well, we need to find more ways of reducing dependence.

So I don't think it's a bubble. I think some companies won't succeed and some will. But generally, almost every firm on Wall Street -- I would say every major firm -- has a fund to invest in alternative energy and these are smart people who know the sector well and believe it's going to be a good, longterm investment from an economic point of view and not only that from an environmental point of view also.

EMERSON: And do you have --

HARBERT: But I think there's an important distinction there. These are alternative energies, not just renewable energies.

: Right.

HARBERT: When we talk about the green revolution, everybody thinks solar and wind and that's it, there's the panacea. We're talking about different ways to power our cars with lithium-ion batteries.

: Right.

HARBERT: We're talking about very -- very interesting new, commercially viable technologies. It's not just about renewable in a green revolution and there's huge amounts of money. When you look at the amount of electricity around the world that we can generate over the next 25 years, we cannot do it with the sources we have available to us now. We cannot.

So how, what are we going to do about it? And that is the best and biggest challenge for American entrepreneurs, is to conquer that challenge.

EMERSON: And there were a lot of serious and nonserious proposals, the tech bubble, too. You, for example, mentioned among, on your checklist, biofuels in a very noncommittal way.

HARBERT: Uhm-hum.

EMERSON: Which I thought was interesting. Biofuels is big, big, big, but we have to watch that. Watch it for collapse or for its takeoff?

HARBERT: I think traditional biofuels in the United States as you all know are corn-based ethanol. It's a very important transition fuel and it is going to allow us to transition to the next second-generation of biofuels which will be produced from all kinds of things from switch grass to plant waste, all kinds of

things, which will have a very important place in our transportation sector. We have to transform our transportation sector by fuel, by engine, by car, by everything. We can't do it overnight.

And right now, we are experiencing a boom in the ethanol industry which I think has sort of hit its peak. Quite frankly, we're seeing some of those big investments in new plants. Have now reached a hiatus. Some of those construction contracts are being canceled. It's not because ethanol is bad. It's not because of the debate about food versus fuel because we're nowhere near that tension in the market, but we are seeing that there is a peak there and that there are other things that are going to come on. We think cellulosity ethanol is going to come on in 2012. That will be much more environmentally sustainable, much more energy-efficient fuel source, and so if you knew that your profit horizon was between now and 2012, would you be forking over big, big bucks just for that?

I think people are starting to see the technology revolution. They're butting up against it. So the investors have made a good profit on ethanol, but it's started to run its course, and it's a good bridge fuel but that's about where it stands I think.

EMERSON: Yes, we recently ran a very interesting chart comparing the different kinds -- what kind of plant should we put into the biofuel and how much energy you'd get out of it, and I forget the range but the range is something like a factor of 100 or more --

HARBERT: Right.

EMERSON: -- depending on which plant you put into it.

HARBERT: And there's a lot of money going on to cellulosity, whether it's the big guys like Dupont and ABM, or the little guys in a garage in Silicon Valley, and nobody has got an advantage because somebody has got to design that microbe and so they're all equal in this. So it's an interesting race.

EMERSON: One thing that's very interesting about this panel is that everybody here has both private sector and public sector experience, including Rana, if you count -- I don't know where media stands, we're sort of somewhere in a gray area -- but Rana joined the dot-com boom briefly, and I'm wondering if in your travels and the alternative energy world, you're seeing of those 20-somethings with a business plan to make energy out of cow dung --

FOROZHAR: Yeah, yeah -- well, you know, I was hired by a venture capital firm in 1999, and I don't think they are hiring journalists yet again. So that probably signals that we're not yet at a -- at quite the same market high. I do think on the bubble question, Dan Yergin in our page -- I'll back up on that -- Dan Yergin in our pages in 2007 I believe wrote that this was the greatest bubbling up -- I think he called it -- of new technologies and ideas that he had ever seen. But point out that as Karen said many of them are extremely experimental. We're talking about things that are still in test-tubes in some cases. So I think it's very difficult to spot what the next big thing is. I think as long as prices stay as they are, I can't imagine interest diminishing anytime soon.

I agree that there's a lot of really smart minds looking into this. I would be -- it would be a great challenge to be in one of these places trying to make the picks right now I think. That's my feeling.

EMERSON: The one signal of this I see, at the height of the tech bubble, I don't know if you remember this, but every company started calling themselves a software company. Ford was a software company. [LAUGHTER] Cisco, which makes hardware, software company. It didn't matter what industry they were in. Exxon is now -- as many of you probably know -- saying we're not an oil company, we're a high-tech company. And that kind of gross rebranding sounds to me like a signal of desperation of some kind and many of you have mentioned technology as part of the future of oil.

Is this real? Is Exxon-Mobil a high-tech company or are they desperately trying to drive up their PE ratio?

CAVANEY: There are two parts to that. Number one, most all the great gains in the energy business in general have come as the result of technology and technology breakthroughs. We spend -- I'll give you some data -- we actually asked our firm to take a look at the amount, the industry invested from 2000 to 2006, over a period of time, how much did they invest in emerging energy technologies in North America?

And the figure with the total investment was \$135 billion. The industry invested almost \$100 billion of that. The government invested 4 billion and some change and the rest was done by all the rest of the other investors -- companies, universities and whatnot.

So if you look at where the money is spent, it is on technology, that's the industry's mantra.

The other thing that's not often done is in the United States that companies pretty typically have for decades and decades, been characterized, and done this to themselves, the oil and gas companies, but if you look globally, they are energy companies. They're in all the other businesses and other places, and so what you're seeing now is a recognition on their part that not only are they a U.S.-based company but they are a global company, and I'd like to just make one comment about the significant difference there. People talk about the last time we had price spikes and the bottom fell out and we had \$10 a barrel oil, and are we going to see that again?

The reason we had such dramatic changes in the last time there was the big oil bubble in the 1970s and early 1980s, was the fact that we could basically try and grow all those alternative technologies on the back of oil and gas by taxing them and driving them down to a noncompetitive basis.

But if you looked around globally, there wasn't any huge demand out there. There wasn't any emerging countries that were going to steal our jobs. It's a different paradigm right now. Right now, what you have is there are plenty of competitors out there. There's huge demand. Even if you reduced the forecast demand by 50 percent, you've still got huge amounts of stuff that needs to be done.

So what's important is that we learn from the last lesson and as we finance all these alternative energies and look for who are going to be able to really add value, let's do it but don't do it on the back of the oil and gas industry who will invest even less than they already are, and if we run short this time, an energy price goes like this, those jobs will leave, those technologies will move, and we will be in very serious

trouble. So this can be done but that's why, when I mentioned in my remarks, we need a comprehensive energy strategy for the country to figure out how to do this.

This is not a bumper sticker idea of we're going to move to the next fuel. We're going to replace oil. We're going to come in with nuclear. You need it all.

In order to make America energy-secure by any yardstick, you're going to need all you can get. So don't take anybody off the table. Make them do what needs to be done in terms of protecting the environment and efficacy, and I think that's the big message that we're trying to have people understand.

EMERSON: Karen, as incoming managing director of the Institute for the 21st Century Energy, this notion of the high-tech big oil company, also seems like a natural for you. Is it happening? Has it happened? Is it happening now? Is it going to happen in the future?

HARBERT: I think there's also two parts to that question, which is, I mean the industry is a very high-tech industry. But as they are motivated by profits, that they have to branch out. If you look at BP, Beyond Petroleum, Chevron, Human Energy, Exxon, a high-tech company, I mean they're all reaching out, just like the Saudis are, just like the folks in Abu Dhabi are and they're looking for the next big thing to capitalize on in meeting this huge demand growth that we're seeing around the corner, and at the same time, trying to look at their reserve base and it's in their interest to invest in energy efficacy measures so they can expand and extend the lifespan of that natural resource base under the ground and that's whether it's state-owned or whether it's an IOC.

You want to be able to get the most that you can out of those reserves that you use as your, as the way that you are valued on Wall Street. And so to the extent that you can produce them more efficiently, you can get people to consume them more efficiently, they'll be around longer, and that's better for your bottomline. So I think they are high-tech. I think they're diversified and they're good investors. They're diversifying their portfolios, while trying to get more of their existing asset base. But they're running up against something I think that we haven't talked about which is the NOCs, which are singular in their motivation, and they're also not motivated by profit, and so they don't have that profit pressure. Gazprom does not have profit pressure like Exxon-Mobil does.

All these other state-owned oil companies don't have that same modus operandi and that same pressure which allows them to make very different financial decisions in either asset acquisition or the way they explore and produce. They're not sensitive to having to turn a profit there. So it's really ... because I'm the only one that hasn't said the word paradigm yet. It's a new paradigm.

[LAUGHTER]

FOROOHAR: I think something to add to that point, too, I think the fact that the IOCs are increasingly working in extreme parts of the world and trying to figure out how to press oil out of shale, working in extremely deep water, in very tough conditions in places like Siberia is actually a competitive

advantage. That's what I hear from a lot of CEOs when I talk to them about this, and that could be a way forward in competing against the NOCs in the future.

EMERSON: Bob, let me let you jump in on that, and then we'll shift to ...

HORMATS: Yeah, I was going to follow-up on a point that Karen made because it's an interesting question. We've been talking a lot about the oil companies, but I think it's -- and the innovation in the energy industry. It seems to me one of the other elements is the innovation and move toward efficiency on the user side. If you go back a decade ago when prices were up, there was a -- when prices of wages were up in effect, there was a great deal of effort by companies to improve their productivity so that they would use the average worker more efficiently. They'd use their average employee to produce more widgets or whatever they were producing or better services or more services.

Now what is also very important in this equation is the effort by the users to utilize energy far more efficiently than in the past, and I think that is another important part of this equation because it's -- as we've all pointed out, it's going to be very hard to get that big burst of supply anytime soon, even with all the technology that's being developed at this point, there is a very tight narrow-range between the available capacity and current demand. So anything could push prices up well above \$100, almost overnight.

So we're really not seeing much in terms of demand destruction at this point and supply capability and surge capability is very limited, really limited to only one country. So, at this point if we're going to deal with this issue, one part of the equation is going to have to be a greater degree of efficiency in the way our societies use energy and other societies use energy a lot more efficiently than we do in this country, and I think what you're seeing, you're beginning to see now firms building green buildings. We're building the green building down near the World Trade Center site.

A lot of companies are beginning to do this. Auto companies are beginning to figure out ways of introducing more hybrid cars. One of the elements of leadership in this country over the next decade it seems to me, in addition to finding ways of increasing supply and alternatives is to explain to the American people if you really want to reduce dependence on imported oil to a substantial degree anytime soon, and I emphasize the word soon, there are going to have to be greater measures taken by individuals, by companies, by the government, to utilize oil more efficiently.

For instance, cities and states or the federal government could take the lead by buying energy efficient cars or making their contractors buy energy-efficient cars or hybrid cars, things like that -- there's a lot we can do. It's not huge in magnitude but at the margin, it's very important and we're really not doing this. We're really not doing this as a country because people were just used to being -- to use a word again -- an old paradigm -- we think we've got all the oil we need. Well, we don't and it's going to become more of a problem unless we do something about it, and that I think is going to be an important part of presidential and congressional and corporate leadership over the next decade or two.

Other societies do it. There's no reason we can't. It's really a change in mentality and lifestyle as much as anything.

AUDIENCE QUESTIONS

EMERSON: Thanks. With that, I'd like to shift to audience questions and again if any of you have questions, you should have one of these things. I was supposed to do this earlier but at your seat or nearby jot it down and you can hand it to Mark or one of the folks walking around collecting them.

Our first question takes off from the idea of the beleaguered industry. Can you compare, and it requires a kind of encyclopedic knowledge of cost data, compare range of production and operating oil supply costs for pre-2000 and today? Do any of the numbers stick in your heads?

We've printed this number and I don't remember it. But it's astronomical. What was interesting to that - about that story to us in part is the data really back up that claim. It's from the pressures of the stock market to production costs, it is a beleaguered industry.

The second question is could you speak to the burden pressure on innovation in this environment? Given price pressures, intellectual capital, supply, et cetera?

[CROSSTALK]

Could you speak to the burden pressure on innovation in this environment given price pressures, intellectual capital, supply, et cetera?

Let me spin this innovation question another way, getting back to the idea of the high-tech company. If the future is -- if the present is already high-tech, is the high-tech future in the hands of the big oil companies? Many of you have probably seen the relatively persuasive argument that the future is smaller, leaner, knowledge, high-tech companies, but they will be the Schlumbergers and Haliburtons, not the companies with huge investment in production costs, companies that are already essentially consulting companies that can set up project teams and so forth, is the future in the hands of the lean and small?

HARBERT: I think the answer is neither.

: Neither, right.

HARBERT: Quite frankly. I think our biggest challenge is the intellectual feedstock to actually get at this innovation and that is going to be equally as applicable to a small company as it is to a huge behemoth of a company. Do we have and are we going to maintain our economic competitiveness in this country by generating the intellectual feedstock we need to conquer this challenge, energy security and environmental sustainability?

If we're not somebody else is going to be turning out those engineers and they're going to be designing a different energy future than what we want to see.

So either we invest, and it's not just in PhD programs and in master's programs, it starts down at the kindergarten level -- I mean we are not turning out scientists and engineers at the level that many other countries around the world that are our competitors in the global economy are.

And so that's not just relevant for energy security, it's relevant for a whole host of things, of economic competitiveness but I argue that energy is sort of the belly of that competition. But unless we really make that a higher priority of rejuvenating the science and technology enterprise of America, we won't have the ability -- small, medium, large -- to actually combat this in real-time. We don't have the luxury of doing it 50 years from now, although 50 years from now, we'll still be talking about fusion, but we have to do it now and we have to have the continued cycle of that intellectual feedstock. It's not just one single jolt to put into the marketplace, we have to really invest in that over time because it's only going to become more complicated and only require more complex solutions.

FOROOHAR: I remember, just to add to that, I remember interviewing Jeroen van der Veer, who's the head of Shell, and he was saying, expressing the same concern about the stock of engineers and science education in Europe. So I think it's a trans-Atlantic issue and just to the point about pressures in the industry, I was grilling him -- during this interview I was grilling him -- about why oil prices are so high. At the same time he had two cellphones and was fielding something about impending windfall tax legislation and as people were being kidnapped in Nigeria.

So even though you're not going to get a lot of sympathy when you have the kinds of billions of dollars in profits that oil companies do, I think it is an incredibly tough job to be the heads of these companies right now.

HORMATS: The education point I think is a very important point. One of the things about this is we had one energy shock in the 1970s and then one in the late 1970s or early 1980s, but the interesting thing is that we sort of retreat into complacency pretty quickly after these shocks. If you go to -- the most interesting shock this country has had, that has had an enduring impact was Sputnik in 1957, when the Russians put this little satellite, about the size of a beach ball, into the air and Americans were shocked that Russia could do this, that it had the technical capability and right after that, there was a surge in investment in new educational capability. There were Congress legislated large sums of money to turn out engineers, scientists, and we had been living to a degree on that investment, just because we were shocked by the notion that the Soviet Union could do this.

We always thought they were so far behind us, it turned out not to be the case. The problem here is we're not -- we don't seem to be shocked when oil prices go up to 100. Well, they're 100, 90. It doesn't seem to have galvanized us in this country to do very much differently. We're doing more research and things of that nature but not sufficiently to the degree needed to deal with these problems, and that's what I find amazing.

I would have thought after 9/11 or after the beginning of the Iraq War, certainly after 9/11 people had said we've got to do something about this but there was really no sort of galvanizing feeling that we needed to reduce dependence on imported oil. Maybe it will take another shock like the 1974, 1975 shock when there were long lines at gas stations, but it doesn't seem to be the case here, and if we don't feel shocked, unfortunately, we're probably not going to do what we need to do.

EMERSON(?): But we are scared and --

HORMATS: We're not that scared. We're not sufficiently scared yet.

EMERSON: We're not scared of the right things -- this is a segue into the next question -- in the wake of Congress's intervention in the Unocal sale, would you say that the United States is becoming increasingly hostile to foreign investment?

HARBERT: Just to do a clarification on the question, actually Congress never intervened in the Unocal sale. Just as a point of fact. There was certainly a sentiment, a political sentiment emanating from the capital that this was a really bad thing, that they were grumbling, and if it happened, that there was going to be legislation, but ultimately, neither the federal government nor the Congress actually did anything.

CNOOC (China National Offshore Oil Corp.) withdrew its bid and ultimately, we know what happened to the transaction, and certainly that sent shock waves I think through a lot of investors in China, in the Middle East, and speaking from my hat as of yesterday, we tried to a lot of things to ensure we're open for foreign investment at the same time, starting to recognize that some of these assets, these infrastructure assets -- energy, ports, telecommunications, the backbone of our IT industry -- is a national security asset.

And so who and how do we want that to be invested in over time? And that's why we have the Committee on Foreign Investment in the United States. That's why we have a new law about it which is very transparent which says here's how we're going to go about it. If it's a national security asset, if it's an energy asset, we're going to take special due diligence, but there's a very time certain of how we're going to do this, and it's a very open process. I'm going to talk to you about it. It would be very helpful if other countries had the same type. A lot of people complain about it here because they are subject to due diligence but at least they know what they're subject to, and most of the other countries, where our companies are doing business, they are not subject to that type of transparency or clarity.

EMERSON: So where did you stand on the Unocal deal? Were you happy to see it die?

HARBERT: We never -- we never actually had to take a position because they withdrew. I think it was just the beginning of taking a look at it. They never actually tendered an offer for us to even begin a review on. So at that point with -- and I will never forget sitting in my office because the Chinese were actually in town for our very first official Department of Energy and our counterpart at the Secretary level and his counterpart from the Chinese, sitting across the table, was the day this whole thing hit. And he looked across the table and he said why is everybody so upset? I don't get it, you guys are just terrible to us. We tried to explain to him about politics. And he said I don't care about politics, I care about money.

And so this is where -- this is why it's going to be very complicated. And they were devastated. They were embarrassed, they were humiliated, and they really walked out with a very, very bad taste in their mouth, failing to really understand what was at play was not the Chinese, was not their oil company, it

was something much bigger and it was a political football that they just happened to be caught in the middle of.

EMERSON: Bob, what would your postmortem on the Unocal collapse be?

HORMATS: Well, we were involved in this to a degree, so I think I will away from the transaction, but let me make a broader point and that is the premise of your question about these -- concern about foreign capital in this country -- leaving aside where it comes from, whether it's sovereign wealth funds or other vehicles -- there's an underlying issue and that is a society that has a low and in some quarters negative savings rate is going to -- and needs capital in order to grow -- is going to have to get it from countries that have a high savings rate. Essentially, capital to invest around the world.

And the notion that we're sort of externalizing this, to me is in a way -- I mean -- in a way misses the broader point. The broader point is we're going to need just to make our own economy work better and not be as dependent as we are if we're worried about that -- we need to have a higher rate of domestic savings in this country and in addition to reducing dependence on imported oil which has a whole range of things that are economic and noneconomic and secured and nonsecured, but the broader point is we have a very low savings rate.

So if you need capital to run an economy and you can't save enough yourself or don't save enough yourself, it's going to have to come from somewhere. It's going to come from the high savings countries abroad. And it's not just China. It's not just the Middle East. It's Russia, it's -- in some cases we're getting it from Western Europe. We better think about that concept as a broader concept, otherwise we're going to depend more and more on foreign capital, and if we start scaring it away, then we've got a real problem.

If you think we've got a credit crunch now, think about a situation where we become in the eyes of the rest of the world hostile toward foreign capital in a broad sense. Obviously, their procedure is from individual investments but if we're broadly seen as hostile, I don't think it's particularly healthy for people whose mortgages and whose car purchases and whose corporations depend on foreign capital. We better think about this a little more carefully.

EMERSON: So don't live in fear of sovereign wealth funds if you start --

HORMATS: Well, it's -- I would say it's a question of what we ought to be focusing on is why we are not saving enough so that we can meet a greater portion of our capital needs at home rather than externalizing these issues. That's my point.

EMERSON: On that point, I'd like to thank our guests. It's been terrific. We really appreciate you coming.

[APPLAUSE]

I'd like to extend an invitation to our Second Annual Global Environment and Leadership Conference at Georgetown on April 8th and to let you know that there are informative packets on Newsweek Magazine and API available as you depart today. Thank you all for coming.

[APPLAUSE]

[END OF PANEL SESSION]