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ENERGY AND THE IRANIAN ECONOMY

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ENERGY AND THE IRANIAN ECONOMY

TUESDAY, JULY 25, 2006

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The Committee met, pursuant to notice, at 10 a.m., in room 210, Cannon House Office Building, Hon. Jim Saxton (Chairman of the Committee) presiding.

Representatives present: Saxton, English, Hinchey, Sanchez, and Cummings.

Senators present: Reed.

Staff present: Chris Frenze, Ted Boll, Colleen Healy, Katie Jones, Chad Stone, and Kasia Murray.

OPENING STATEMENT OF HON. JIM SAXTON, CHAIRMAN, A U.S. REPRESENTATIVE FROM NEW JERSEY

Representative Saxton. Good morning. It is a pleasure to welcome Mr. Simons, and the members of the second panel of witnesses before the Committee today. Given the course of events in the Middle East, this hearing on energy and the Iranian economy is very timely. Iran is a country with immense wealth in the form of oil and gas reserves. Iran has the third largest oil reserves and the second largest national gas reserves in the world.

Unfortunately, despite the country's great economic potential, the government of Iran has adopted policies that have undermined the country's economic development and standard of living. Despite Iran's huge oil and gas reserves, the Iranian regime is intent on extending its nuclear program, supposedly for peaceful purposes. However, the regime's deception regarding the nuclear program, its aggressive promotion of terrorism, and its President's recent statements concerning Israel obviously constitute a grave threat to world peace.

The facts before us today concerning Iran's large energy reserves undercut assertions by the Iranian regime that the nuclear program is needed for peaceful nuclear power generation.

Iran's leaders have also sought to intimidate oil-consuming nations by threatening to cut off Iranian oil. However, Iranian oil exports generate a high percentage of Iranian export earnings and finance a significant portion of government spending. In short, the Iranian Government and economy are highly dependent on oil exports and threats to cut off these oil exports do not seem credible.

The Iranian economy labors under a heavy burden of government mismanagement, cronyism and corruption, facilitated by government-affiliated foundations and enterprises. The Iranian people pay a high price for the failures of the regime's economic policies, but the prospects for reform of these policies are bleak in the near term.

In view of the Iranian regime's aggressive behavior, the feasibility of sanctions against the regime must be considered. Iran's reliance on imported gasoline is one potential pressure point. However, the effectiveness of sanctions would depend on the willingness of a much broader group of nations acting in concert with the United States to contain Iran's threats. The coming weeks and months will reveal whether a broader attempt to impose sanctions will be tried and produce positive results.

At this point I would like to yield to Senator Reed for any comments he may have.

[The prepared statement of Representative Saxton appears in the Submissions for the Record on page 36.]

OPENING STATEMENT OF HON. JACK REED, RANKING MINORITY, A U.S. SENATOR FROM RHODE ISLAND

Senator Reed. Thank you very much, Mr. Chairman. I think this is a very timely and important hearing and I commend you for calling it. As we monitor diplomatic developments surrounding the nuclear standoff with Iran and as the current conflict between Israel and Hezbollah continues to destabilize the region, this hearing on energy and the Iranian economy is very important and very timely.

Iran has recently enjoyed strong economic growth primarily due to high oil prices. Despite some progress in reforming certain aspects of the economy, the Iranian economy continues to suffer some significant structural weaknesses. First, its heavy reliance on oil revenues makes it extremely vulnerable to oil price shocks. Second, entrenched political interests impede substantive economic reform. Last, the country continues to rank poorly on various indicators of foreign investment risk.

Such vulnerabilities lead some observers to conclude that the United States and its allies may have some leverage primarily through sanctions, possibly backed up by the threat of military action, in convincing Iran to abandon any nuclear weapons ambitions. However, oil prices are expected to remain high at least through 2007, and with the global oil market Iran will always find alternative customers in countries that are willing to violate sanctions to advance their own interest.

Even if Iranian oil exports were to slow somewhat, the higher prices that result would at least temporarily cushion the revenue impact. Iran's vast energy reserves promise that the country will remain attractive to foreign investors.

Russia and China recently signed on with the United States and its European partners in seeking a United Nations Security Council resolution ordering Iran to freeze its nuclear program or face possible sanctions.

To be truly effective on their own, sanctions must target the oil exports that are central to the Iranian economy. Given tight oil supplies, however, it is highly unlikely that all six negotiating partners would ultimately agree to such comprehensive economic sanctions. In fact, a decade's worth of experience with the Iran-Libya

Sanctions Act, or ILSA, which was implemented during a period when oil was relatively cheap and plentiful, suggests our allies' reluctance to further rattle the global oil market. Further, both Russia and China have indicated that they will not support military action against Iran.

The experience with the United States sanctions against Iran suggests that a unilateral approach simply will not work. U.S. sanctions have not prevented Iran from developing what International Atomic Energy Agency inspectors believe to be a potential military dimension to its clandestine nuclear program or from continuing to sponsor terrorist organizations such as Hezbollah and Hamas.

Some analysts believe that U.S. sanctions have done more to isolate the United States than to isolate Iran. Rather than taking a unilateral approach, the United States must continue to work with the United Nations community. If universal comprehensive economic sanctions are not feasible, we must focus on a more effective mix of targeted sanctions that our negotiating partners can agree to. Targeted sanctions may not cripple the Iranian economy to the point where it is financially incapable of developing a nuclear weapon; however, coupled with concerted diplomatic efforts, the right mix of sanctions has the potential to convince Iran to abandon any nuclear weapons ambitions it may harbor.

I look forward to the testimony of our witnesses here today. In addition to hearing about the state of the Iranian economy and energy sector, I hope to discuss ways in which sanctions could be effectively applied, preferably as part of a multilateral diplomatic effort.

Thank you very much, Mr. Chairman.

[The prepared statement of Senator Reed appears in the Submissions for the Record on page 41.]

Representative Saxton. Thank you, Senator Reed.

I am very pleased to be able to welcome the Honorable Paul E. Simons, Deputy Assistant Secretary for Energy, Sanctions and Commodities at the U.S. State Department's Bureau of Economic and Business Affairs. Mr. Simons, thank you for being with us.

STATEMENT OF HON. PAUL E. SIMONS, DEPUTY ASSISTANT SECRETARY FOR ECONOMIC AND BUSINESS AFFAIRS, DEPARTMENT OF STATE

Mr. Simons. Thank you, Mr. Chairman, Members of the Committee. Thank you for your initiative in calling this hearing on this important issue. Let me also congratulate the staff for the preparation of an excellent Committee report on Iranian energy that I think helped us get prepared for the hearing this morning.

Iran, as you have noted in your report and as we have noted in our written testimony, does play a significant role in international oil and gas, but Iran is also a country whose policies and actions have long been cause for deep concern to the United States and our international partners. Given its pursuit of weapons of mass destruction and missile delivery system, its place as the leading state-sponsor of terrorism, its support for violent opposition to the Middle East peace, its unhelpful role in Iraq, and its oppression of its own citizens, as well as its abysmal human rights record, Iran does pose, as Under Secretary of State Burns recently said, a profound threat to U.S. interests.

Iran's concerted effort to develop a nuclear weapons capability has become the focus of particular concern not only for the United States, but also for the broader international community, as reflected in the resolution adopted in February by the International Atomic Energy Agency Board of Governors and in the March statement by the U.N. Security Council.

On June 6th, the governments of the United States, the United Kingdom, France, Russia, China and Germany, referred to as the P5+1 countries, offered Iran a set of far-reaching proposals that presented that country with a clear choice between two paths.

One path would lead to important benefits for the Iranian people if Iran suspends all its enrichment-related and reprocessing activities and enters into negotiations on the basis of the P5+1 offer. Secretary Rice has made clear that the United States would be willing to join the negotiations if Iran fully and verifiably suspends its enrichment program.

However, if Iran chooses the other path and continues on its current course, it will face greater international isolation and strong U.N. Security Council action.

Iran has failed to take the steps needed to allow negotiations to begin, specifically the suspension of all its enrichment-related and reprocessing activities. Absent such a positive, concrete response from the Iranian government, we and our international partners really have no other choice but to return to the Security Council to adopt a resolution that would make that suspension mandatory.

Let me turn now briefly to the issue of energy. And I would ask that my full statement be admitted to the record, and I will make some brief comments.

On the energy issue, as you have noted in your opening statement and in the report, Iran is the world's second-largest holder of natural gas reserves, and it ranks second or third in conventional oil reserves. It does have a current oil production capacity of just over 4 million barrels a day, making it OPEC's second-largest oil producer and its second-largest oil exporter, at about 2.6 million barrels per day.

What is striking, though, and as you have noted in your report—and a view that is endorsed as well by the State Department—is that Iran is not as prominent a player in the international oil and gas scene as its geological potential would suggest. So despite its huge gas reserves, Iran basically has a very limited gas export potential at present.

It also hasn't really moved very intensively toward developing a liquefied natural gas export capability, and as we note in our statement, this contrasts with the situation in Qatar, Iran's small neighbor just across the Gulf which has moved very aggressively, has attracted massive foreign investment, and is very actively developing LNG and other gas projects with the assistance of the international investment community.

Iran has expressed its intention to expand its production of both oil and gas. There have been various notional targets put out, but its efforts to attract foreign investment through buy-back arrangements—which are explained in some detail in your report—which were initiated in 1995, have met with only limited success. Foreign investment in this sector does appear to be slowing. There are a combination of factors. Certainly one factor is a strong perception of heightened political and financial risk due to Iran's own behavior.

In addition to the discouraging impacts of Iran's problematic policies, its pursuit of nuclear weapons has raised the possibility of international sanctions, which several of the Members have noted here. And as a result, international companies have found it difficult to reach agreement with Iranian negotiators on terms that would essentially offset this high level of political risk.

Iranian oil refining capacity is also inadequate to meet demands. There has been inadequate investment in the downstream sector. So this is also an issue.

Let me just conclude briefly with a couple of remarks about the nuclear side. The P5+1 package that I mentioned earlier in my statement, and which was put forward in May, reaffirms Iran's right to nuclear energy for peaceful purposes in conformity with Iran's obligations under the Non-Proliferation Treaty, the NPT. And both the President and the Secretary have made that point quite clear. We are not seeking to deny peaceful nuclear energy to the Iranians.

However, Iran's long history of deception and noncompliance with its NPT commitments and its IAEA safeguard obligations have created something of a loss of confidence in Iran's intentions. So, as the President has said, civilian nuclear energy is a legitimate desire. We do believe the Iranian people should enjoy the benefits of a truly peaceful program to use nuclear reactors to generate electric power. As the President noted, America does support the Iranian people's right to develop nuclear energy peacefully, but with proper international safeguards. This is the important point.

Let me conclude by stating that with its enormous natural resource endowments and its very talented people, Iran really ought to be among the more prosperous countries in the world. I think this point is also reinforced in the Committee report. But counterproductive economic policies, mismanagement, corruption, and misguided goals, such as the dangerous request for nuclear weaponry, have in fact dimmed Iran's economic prospects.

Iran's economic problems reflect in some ways its negative political culture with all the problematic manifestations which were outlined earlier in my statement. But as President Bush recently noted, Americans do admire the rich history, the vibrant culture of Iran, and its many contributions to civilization. The President recently said that the people of Iran, the people everywhere, also want and deserve an opportunity to determine their own future, an economy that rewards their intelligence and talents, and a society that allows them to pursue their dreams. Thus far, these dreams have been sadly thwarted.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Simons appears in the Submissions for the Record on page 43.]

Representative Saxton. Thank you, Mr. Simons.

Let me get right to the matter that is of concern to us. You said in your testimony that Iran is richly endowed with the second or third largest oil reserves and the second-largest natural gas reserves, and that this becomes an extremely important economic factor to that country.

As a matter of fact, Iran's revenues from oil exports were about $47 billion in 2004 and 2005, and that its oil therefore accounts for about 80 percent of Iran's export revenues. In addition, the central government's revenue is accounted for by oil exports to the extent of about 50 or 60 percent, according to indications that we have, and oil and gas exports amount to about 20 percent of GDP.

With oil supplying such a high percentage of revenue to support the Iranian government's budget and military spending, how credible do you think are their threats to cut off the oil supply?

Mr. Simons. Clearly I think you have outlined the importance of oil and energy to the Iranian economy and to the Iranian economic engine. I don't think I can really speculate here in an open session about the motivations behind a potential unilateral shutoff of oil by Iran. There has been extensive press speculation on this.

Perhaps we could have a closed session where we could get into a little bit more detail.

But I would just like to make a couple of points here. First, Iran is an important contributor to global energy stability, and it does export about 2½ million barrels a day. We do have capabilities in place to handle a potential shutoff of these flows were that to occur. So the United States and other members of the global energy community are certainly prepared if the situation goes that way.

But beyond that, I really wouldn't want to speculate in this setting behind the possibility that Iran might take a unilateral step in this direction.

Representative Saxton. I appreciate that, but I guess maybe these facts kind of speak for themselves: $47 billion in 2004 and 2005 in exports, which amounts to 80 percent of Iranian exports, not just oil exports, but all exports. And the central government depends on these oil exports for something like 50 or 60 percent of its resources, and that oil and gas exports amount to about 20 percent of GDP.

That means that exporting oil is a critical factor in the Iranian economy, and the reason that I emphasize this point is that every time the Iranian leadership rattles its oil drum, the price goes up here at the pump. Perhaps that is not a necessary reaction.

So, I just wanted to make this point. Wouldn't Iran's economy and government be crippled without the revenues produced by oil exports?

Mr. Simons. Once again, there is no question that oil and gas are the centerpiece of the Iranian economy and that were there to be some type of interruption in Iranian oil production, there would be a significant impact on the Iranian economy.

As I mentioned, the impact on global oil economy could be accommodated by various measures that we could put into place. But certainly for the Iranians, there would be a significant impact.

Representative Saxton. Thank you. I think one would conclude that this is a very strong suggestion that Iran's threats to cut off oil exports from time to time are mostly, if not entirely, empty in my view.

I think this is an extremely important point, because in the past they have been able to affect Western economies by issuing threats from time to time. When we understand the nature of and importance of petroleum exports to their country, it appears to me at least that Western investors and Western business people and Western governments have not put it in the right context to the extent that we might have.

With its immense and undeveloped resources in oil and natural gas, do you believe there is a compelling need for Iran to develop nuclear power and a nuclear power industry for peaceful energy production?

Mr. Simons. Mr. Chairman, I think the Committee has done good work laying out the scope of potential that Iran has were they to fully develop their oil and natural gas reserves. As Secretary Rice recently pointed out, we fundamentally don't understand why Iran has to have a civilian nuclear power capability. From an economic standpoint they would be able to develop—they could develop, on the electricity side, sufficient gas power generation to meet their needs.

However, as the Secretary also pointed out, nuclear power is part of an energy strategy for many countries that seek to decrease their exclusive dependence on hydrocarbons. So, we have been pursuing in this country a diversification strategy where we look to different elements of the technology basket to meet portions of our electricity needs, and many other countries around the world do this. So, I think what we have really been stressing is that in order for this civilian nuclear program to be acceptable, it has to contain the proliferation risk, and this is really what our focus has been.

Both the Secretary and the President have noted that we are not seeking to deny the Iranians access to civilian nuclear technology, or not necessarily either to particularly second-guess how they define their desirable mix in terms of how they define their energy security. So it is an option that is out there and we just want to make sure it is made available in ways that protect global nonproliferation concerns.

Representative Saxton. Let me turn for just a couple of minutes to the issue of potential economic sanctions which, incidentally, Senator Reed and I both agree have to be international and multifaceted in nature. The economic incentives offered Iran from refraining from uranium enrichment are quite substantial, as I believe you mentioned in your testimony. Can you comment on them and why Iran has not accepted them?

Mr. Simons. My understanding, Mr. Chairman, is that the Iranians have indicated that they will respond later in August to the package that has been put forward. As I mentioned in my opening statement, we do think they have a fairly stark choice in front of them. They can choose a path of cooperation, which would create a series of incentives for them to work with the international community to develop a civilian nuclear capability, if they so choose, and to afford them these rights which are part of their membership in the NPT.

So these are options that are out there that fulfill some of their economic and political aspirations and some of the aspirations of their people in terms of putting Iran on the global stage.

On the other hand, if they choose the other route, we do feel that we have a group of countries, probably for the first time in many years, a strong multilateral coalition that would take this issue to the Security Council and seek to more actively deny Iran some of those same options.

Representative Saxton. Does the fact that Iran imports refined gasoline create a vulnerability that could be used to pressure the regime?

Mr. Simons. I think you have pointed out in your statement, Mr. Chairman, and in your report that Iran does import something on the order of 170,000 barrels a day of gasoline. Over the last couple of months there have been some internal discussions inside Iran of ways in which they could reduce that dependency by initiating conservation measures, and by boosting local refined product capability.

But for the time being, I think the point you make is basically correct: Iran is an extensive exporter of crude petroleum and imports a large chunk of its refined products. Again, in open session, I wouldn't want to get into a detailed discussion of how these tradeoffs might play when one takes a look at sanctions options, but perhaps, again, we could discuss that in a closed session.

Representative Saxton. Let me just ask one final question; then we will go to Mr. Hinchey. How vulnerable is Iran to the loss of other products, specifically agricultural products, and what other economic pressure points or vulnerability might Iran have?

Mr. Simons. If I could ask you to clarify; loss of access on the import side or export?

Representative Saxton. Import.

Mr. Simons. Well, Iran is a significant agricultural importer. U.S. law and policy exempts agricultural products, certain kinds of agricultural products, from our sanctions regime; so we are able to export certain types of agricultural products to Iran and to other countries that are under sanctions.

So, generally speaking, again, I wouldn't want to speak for the Congress, but in terms of the sanctions world, the trend has been to focus our attention away from the food side and the medicine side of the equation. That has generally been the focus of the Administration, as well as successive Congresses.

Representative Saxton. Other than gasoline, are there other elements of the economy of Iran that would be affected by sanctions—or could be?

Mr. Simons. Well, it all depends on what you decide to target. I think the scope is rather large, but as I think Senator Reed mentioned when he was here, we have found that sanctions that are applied multilaterally and that are targeted not at the broader population, but more at the portions of the regime that are responsible for the undesirable behavior tend to be more effective.

So, I think when you take a look at some of these broader-brush types of sanctions options, you do have to keep in mind what type of impact that you might have, and I think you want to make sure when you design these programs that the impact is focused in on the group whose behavior you want to affect.

Representative Saxton. I apologize to Mr. Hinchey. Every time you give an answer it raises another question in my mind.

Many of the businesses, particularly which are involved in import, export, and development of energy, and perhaps even nuclear pursuits, are very closely related to the government, aren't they? They are not businesses as we think of them; they are either owned by or very closely associated with or controlled by the regime. Is that right? Those are the elements of the economy that we would want to perhaps target.

Mr. Simons. Well, again, I would prefer to get into the details of any kind of targeting discussion in another session.

Representative Saxton. Just being able to ask the question makes the point.

Mr. Simons. One way to look at it would be to focus on government-owned companies in the energy sector; but another way of looking at it, which is the way the Administration has focused initially, has been taking a look at those companies that are directly participating in Iran's weapons of mass destruction-related activities and trying to pinpoint those companies and to shut down their operations and their ability to function.

So I think there is a subset of these government-owned companies that are more directly related to the nonproliferation stream that has been our initial focus, and we have an Executive order and we have designated certain companies under that Executive order for sanctions.

Representative Saxton. Thank you very much, Mr. Simons.

Mr. Hinchey, please feel free to take as much time as you need.

Representative Hinchey. Well, thank you very much, Mr. Chairman. I appreciate your holding this hearing and giving us this opportunity to learn more about what the State Department in this particular case is doing in this situation. I very much appreciate your testimony and your response to our Chairman's questions, Mr. Simons. Thank very much for being here.

The Middle East is of course, as we know, the most volatile and dangerous part of the world and Iran is one of the most significant countries in the Middle East, even if you were to just limit that to the possession of huge amounts of oil and natural gas. But they are significant for other reasons, including a very large population and a very strong country, even considering the context in which they operate.

The sanctions that were imposed by the United States, even though those sanctions have not really been carried out, I believe date back to the 1980s. Am I mistaken about that, or can you give us the exact date?

Mr. Simons. Well, the principal set of U.S. unilateral sanctions were put into place in 1995 and 1997.

Representative Hinchey. Aren't there sanctions that go back, however, to the 1980s? Weren't there some actions taken back in the 1980s at the same time that Iran Contra was of great controversy here?

Mr. Simons. There were some financial-related sanctions, some asset freezes, but the broad prohibitions on U.S. business involvement in Iran actually date to the Clinton administration.

Representative Hinchey. What took place back in the early 1980s, specifically? Can you tell us what happened?

Mr. Simons. Going back to November 1979, President Carter issued an Executive Order freezing Iranian assets and banning imports from Iran, in response to the takeover of the U.S. Embassy in Tehran. In April 1980, the President banned all commerce and travel between the United States and Iran, because of the continuing hostage crisis. However, these measures were subsequently lifted pursuant to the Algiers Accords, under which the U.S. hostages were freed. In January 1984, Iran was designated a state-sponsor of terrorism, which resulted in the application of specific statutory restrictions incident to that status. In October 1987, most imports from Iran were prohibited because of its support for terrorism. Broader prohibitions, including on U.S. exports and investment, were imposed in 1995.

Representative Hinchey. The relationship that Iran has with other countries is seemingly much more normal. They have good relations with China, with Russia, and with a number of European countries, if not most or all of the European countries, particularly mainland Europe. So it would seem that any attempt that we might take to impose some economic problems on that country by initiating sanctions would have a good deal of difficulty in succeeding, given the fact that other countries are very likely to step in and increase their economic relationships with Iran. Don't you believe that that is the case?

Mr. Simons. I think we are really in a fundamentally different situation than we were back in the 1990s. When we imposed the unilateral sanctions back in the mid-nineties the United States was seeking to move ahead the Middle East peace process, and I believe, Congressman, you played a role in that. If I am not mistaken, we had some contact on this back in the nineties. I think you came out to Israel when I was out there. So you are very familiar with the issue.

Iran was a major obstacle to forward movement in the peace process and also we saw a number of demonstrations of Iranian support for international terrorism that were very troublesome, and this is what led the Clinton administration to impose at that point the unilateral sanctions. I would agree with you, at that point, many of our partners around the world were not choosing to go this route and were pursuing greater economic ties with Iran.

But what has happened in the last couple of years and I think what represents something of a sea change is that today in 2006, we have been able to mobilize a fairly robust international partnership and coalition of countries that are prepared to take a tough look at Iran and that have been speaking with one voice to the Iranians and that culminated in the package that was put forward at the end of May, and the two choices that I outlined earlier.

And the difference this time around is that we do have the international community speaking with one voice on Iran, probably for the first time in many, many years, and we have been able to work this diplomacy effectively. I think it is one of the signature achievements of this Administration that for the first time we have been able to have a common multilateral definition of the Iranian problem and of a possible solution.

Representative Hinchey. I think it is true that anyone who thinks about it would much prefer that the Iranians, and a great many other people, other countries around the world, were not developing nuclear weapons; because the more nuclear weapons there are in the world, the more likelihood is that one of them is going to go off someplace and cause some serious problems, including the possibility of one going off here in the United States.

So it is pretty evident that most people are concerned about the proliferation of nuclear weapons, and I think in a country like Iran that makes some sense. But in terms of the way in which we are dealing with Iran and the imposition of sanctions—and those sanctions which were imposed during the 1990s have never really taken place. Nothing really has ever been done to implement those sanctions; is that correct?

Mr. Simons. No, I don't think that is correct. Certainly, U.S. businesses are not active in Iran currently and have not been active for the past decade. We would also argue from the Administration's perspective that there has been a lot less involvement by the rest of the world than there otherwise would have been if we had not gone down this road.

So, a lot of the conclusions I think that the Committee report came to in terms of the rather slow development of the Iranian oil and gas sector, there were many reasons for this; and certainly you can't put the entire monkey on the back of sanctions, but the sanctions regime played some role in slowing the development of Iran's oil and gas sector.

Representative Hinchey. In the context of the discussions within the Department of State with regard to this situation, to what extent do you regard the reaction of Iran to the United States to be a result of the President's inclusion of Iran in the so-called axis of evil with Iraq and then having attacked Iraq?

Mr. Simons. I think the President's statement stands for itself and is an accurate description of the threats that Iran does pose, which I outlined as well in my opening statement. So this Administration and previous Administrations have had very, very significant concerns with Iranian behavior. This is really what motivated the Clinton administration to put in place the sanctions back in the nineties. So there has been a history of U.S. Executive Branch as well as congressional concern with a wide range of Iranian behaviors: the terrorism issue, human rights, peace process, and now the proliferation issue.

So I think the President's statement was quite consistent with policies that have been adopted before and after.

Representative Hinchey. When did Iran sign the Nuclear Non-Proliferation Treaty?

Mr. Simons. I am sorry, I don't have the exact date that they signed, but they have been a member for many years.

Representative Hinchey. Are we aware of significant violations of the NPT by Iran?

Mr. Simons. I think what we are trying to do here is to construct a set of incentives that would oblige Iran to carry out its civilian nuclear responsibilities in ways that are consistent with the NPT and that would draw the International Atomic Energy Agency into a supervisory role to ensure that Iran does abide by its NPT obligations.

Representative Hinchey. Thank very much, Mr. Simons. Thank you, Mr. Chairman.

Representative Saxton. Mr. English.

Representative English. Thank you, Mr. Chairman.

Mr. Simons, we have seen an international effort to engage Iran that has included, I think, a powerful set of economic incentives that have been offered to Iran to refrain from uranium enrichment. I guess, looking at this, I have seen very little evidence that Iran has responded to those incentives.

Do we have any reason to believe that Iran would respond differently to other economic incentives, including sanctions, and can you detail for us any change in Iranian behavior that have resulted so far from the sanctions that have been included in ILSA?

Mr. Simons. Thank you, Congressman English. I believe that the discussion of sanctions and the fact that the international community has stood with a united front over the last 6 months in keeping a sanctions option available has had a lot of impact and has affected thinking around the world, including in Iran.

I think it is a little difficult to point to any specific evidence of this, but certainly going back to Mr. Hinchey's observation, we had a situation for the past decade in which European countries were pursuing economic engagement with Iran and not really availing themselves of a sanctions option. Now the sanctions option is very much front and center as the consequence of Iran choosing not to cooperate with the international community.

So I do think that that has had a significant impact on thinking. I think it has to some extent—and the Secretary has made this observation as well—it has affected the political risk calculus of businesses and banks that might otherwise be thinking of expanding or continuing their involvement with Iran.

We have seen some evidence of a slowdown in investment, we have seen Iran's credit rating being downgraded, for example, in the OECD, and we have seen some other evidence that by stoking up the level of political risk and by not offering economic incentives to offset that political risk, that Iran already, even before sanctions are imposed, is becoming a less desirable place to do business. So I do think that having the sanctions option in full view has been very important.

You raised a second question about ILSA, and in this regard the Administration did send a midterm report up to Congress last year in which we detailed what we believed to have been the impact of ILSA in terms of investment. And here too, as I mentioned earlier, we do believe that ILSA has played some role in terms of slowing the pace of investment in Iran's oil and gas sector.

Representative English. In other words, you are suggesting that ILSA has had an effect on the international business community's interactions with Iran. Have you seen any change of behavior on Iran's part, either at the government level, or has this had any impact on economic players below the government level, within the country and its economy?

Mr. Simons. I think I might defer to some of our following witnesses who might follow this a little more carefully. But I would just note that in looking at some of the Iranian government statements that have been made since the sanctions option has been out there, the Iranian government appears to have been making a lot of efforts to suggest that all is well on the investment front and has been seeking out opportunities to present a normal face, a kind of positive face in terms of investment. And I think the fact that they are engaging in that type of campaign suggests perhaps that all is not so well.

Representative English. I appreciate that, Mr. Simons. I realize the questions I have raised here are very difficult because this is a very difficult area of policy, but I am grateful to the Administration for pursuing the aggressive course it has and the diplomacy it has in dealing with the thorny issue of Iranian enrichment. And I am grateful to you, Mr. Chairman, for giving us an opportunity in this hearing to fine-tune how we approach engaging Iran and encouraging them to play a more active and positive role in the international community.

So I thank you and I yield my time.

Representative Saxton. Thank you very much, Mr. English. I move now to Ms. Sanchez.

Representative Sanchez. Thank you, Mr. Chairman, and thank you, Mr. Simons, for testifying before us.

Do you really believe that—what do you think the real impact would be, if we do have a stand-off and we are not able to come to an agreement with respect to the enrichment issue in Iran, if the world powers got together and say we are going to have sanctions against this country?

First of all, do you really believe places like China and Russia would actually follow that, or their business interests would follow that? And, second, what would be the impact if there was leakage in particular from—let's say from those two areas?

Mr. Simons. Thank you, Congresswoman Sanchez. It is a little difficult for me to get into a speculative realm here. I would just note, though, that China, Russia and other countries did stand up with us in the IEAE votes; two very important IEAE votes over the past 6 months they stood with us and the rest the international community in terms of insisting that Iran meet its commitments. And the Secretary and Under Secretary Burns have made it their highest priority to work with this P5+1 group that I described in my opening statement, and it is one of the highest priorities for this Administration's diplomacy.

So I do think that the fact that we have assigned this priority and that we have been able to speak with one voice to this point is a very important achievement.

Representative Sanchez. With respect to China and the fact that if you take a look at what it has been doing in the last few years and having long-term contracts for energy availability, have you seen them have any interaction with respect to Iran in that situation?

Mr. Simons. That is a good question. I actually was in Beijing last week for some discussions on energy issues, and there is no question that China faces daunting challenges meeting its future energy requirements, given the projections of explosive economic growth. You can just see it all around.

They are looking abroad, they are launching upstream investment activities in many parts of the world. But at the same time, as former Deputy Secretary Zoellick pointed out in a speech that he gave, we are seeking to work with the Chinese to develop a responsible stakeholder role for China whereby they would take a close look at the political and security consequences of their energy policies.

Representative Sanchez. That sounds nice, but my question was have you seen any contract, any deals going on with Iran with respect to securing energy for the future, from China?

Mr. Simons. I think many countries around the world, China, India, others, are engaging in discussions——

Representative Sanchez. But we haven't seen anything.

Mr. Simons [continuing]. Discussions. Let me continue for a minute. As with many of these discussions, they go on for many years. And as the Chairman has pointed out, Iran is the second-largest holder of gas reserves, second-largest, third-largest oil reserves in the country. So you will not be able to shut off this process of discussion that goes on and of keeping doors open, and so our job in the Executive Branch is to ensure that some of these other factors that you point out are brought to the attention of the Chinese authorities and other authorities.

Representative Sanchez. I am going to cut you short because you are running through my time on answering—of giving me answers to questions I didn't ask.

With respect to any economic reforms, have you seen any going on in the economy for Iran? I ask that from the whole sense that there are a lot of people that believe that the most moderate people in that region would be the Iranians, the people—I am not talking about who controls the government.

Have you seen—what type of economic reforms, if any, have you seen in that country? And the second question with respect to the rise of price in gas, in getting that money back into the economy, what has the government or the Iranians done with those moneys? Has it gone to military spending; has it gone into infrastructure building; what have you seen?

Mr. Simons. As to your first question, we have not seen much evidence of economic reform, but countries that receive surges of oil income rarely have the incentives to undertake economic reform, so it is not unexpected that the Iranians would not push ahead on reforms.

With respect to the use of funds, some of the petroleum reserves go back into the general budget and they finance a variety of development expenditures, security expenditures, everything that would go into a general purpose budget. So there has been some focus, additional focus on development issues, because there has been a budgetary surplus as a result of the oil revenues. This is consistent with revenues that would come from tax or other sources.

Representative Saxton. Thank you very much.

Mr. Cummings.

Representative Cummings. Thank you very much, Mr. Chairman. Iran said that it will respond on August 22nd to the incentives being offered by the United States and our allies to entice it to give up its nuclear weapons program. If Iran responds by withdrawing from the Nuclear Non-Proliferation Treaty, what leverage would be available to the United States and/or the United Nations to try to slow the Iranian nuclear program, particularly if countries like Russia and China remain opposed to sanctions and to other measures that they consider to be provocative?

Mr. Simons. Thank you, Congressman. I am afraid that question is a little bit out of my area of expertise, which tends to be more on the oil and energy side. But I would just note that we have given the Iranians a choice of paths that they can follow, and it has been fairly clearly enunciated, and we do have all the major powers of the world aligning themselves, the P5+1, in the direction of a path of cooperation which would enable the Iranians to access civilian nuclear technology, admittedly under safeguards.

But this is something that the Iranians will need to take, obviously, a close look at. But these are the choices that are ahead.

So either they can pursue the path or they can pursue the path of isolation. On July 12, the Permanent Members of the U.N. Security Council, plus Germany (the P5+1), noting that Iran had given no indication that it was ready to engage seriously on the substance of the proposals presented on June 6, agreed to seek a Security Council Resolution that would make mandatory Iran's suspension of all uranium enrichment and reprocessing activities. The P5+1 also agreed that should Iran fail to comply with such a Resolution, we would work for the adoption of measures under Article 41 of Chapter VII of the U.N. Charter, which provides for sanctions.

Representative Cummings. I appreciate that. Particularly as the United States has virtually no contact with Iran now and has imposed unilateral sanctions since the 1980s, could additional sanctions even be imposed against Iran if they were not fully supported by the U.N. and by countries like Russia and China?

Mr. Simons. I think you make a good point, Congressman Cummings, in the sense that the U.S. sanctions are already quite comprehensive, so the approach the Administration has followed is to take a look at how other countries around the world could basically look at those kinds of options and could to some extent associate themselves with some of the things that we have already had on the table for some time.

Representative Cummings. Well, I mean when you consider Iran's role with regard to terrorism, have you seen any effect with regard to Iran's behavior since we have been imposing sanctions since the 1980s? Have you seen any effect on those sanctions?

Mr. Simons. As I mentioned in my opening statement, we still have very, very significant concerns with Iranian support for terrorist organizations, up until the events in the past few weeks, and clearly the Iranian supply of Hezbollah has been a huge problem. I think this is an issue we continue to work on and it is a concern. And it is a concern now that we have—I think the important factor now is that we have a broader coalition of countries that look at the issue the same way that we do, which is a significant advance over where we had been for the prior decade.

Representative Cummings. Thank you, Mr. Chairman.

Representative Saxton. Thank you, Mr. Cummings.

Mr. Simons, thank you for being with us this morning. I would like to conclude with one thought and that is that you just mentioned the events of the last few weeks, and one of the outcomes of the events of the last few weeks that has been noted is a different attitude toward Iran even among or maybe particularly among Middle Eastern governments. I am thinking of Saudi Arabia and Egypt and Morocco, of course, and Northern Africa who have, I believe, in each case failed to condemn the actions of Israel, which is unusual, against the Hezbollah, the Iranian backed Hezbollah, and I find that as a very interesting development subsequent to the actions in Israel and Lebanon.

So thank you for being with us. We appreciate it very much. Your perspectives are very valuable to us, and thank you for what you do and keep up the good work.

We are now going to move to introduce our second panel. Dr. Kenneth Katzman, a specialist in Middle Eastern Affairs, Congressional Research Service and the Library of Congress. Second, Mr. Ilan Berman, Vice President for Policy of the American Foreign Policy Council. Third, Mr. Andrew Davenport, Vice President, Conflict Securities Advisory Group, here in Washington, DC. And Mr. Jeffrey J. Schott, Senior Fellow for the Institute for International Economics.

Thank you for being with us. And why don't we start with Mr. Katzman and we will kind of move across the dais here.

Dr. Katzman, the floor is yours.

STATEMENT OF DR. KENNETH KATZMAN, SPECIALIST IN MIDDLE EASTERN AFFAIRS, CONGRESSIONAL RESEARCH SERVICE, LIBRARY OF CONGRESS

Dr. Katzman. Thank you, Mr. Chairman. Thank you for asking me to appear at today's hearing. I will summarize my remarks and request the full statement be placed in the record.

To summarize, I am going to focus today primarily on the politics of Iran's economy rather than the hard facts of Iran's economy. Iran's economy is highly resistant to reform because it is in the interests of those governing the regime to keep the economy exactly the way it is.

Iran's leaders are able to steer the proceeds or parts of the economy to provide patronage, build their constituencies, particularly among the lower classes.

Because Iran's political leaders benefit from the structure of Iran's economy, there is little chance under the current system of major structural economic reform.

What I would like to talk about is the engine of this system that the clerics run are the quasi-state, the state funded, state directed foundations called bonyads, a Persian word meaning "foundation." These are informal networks. They are controlled by key clerics or former or current government officials. They are technically not under the authority of the Ministry of Welfare and Social Security, and they do play a role in social welfare. However, their criteria are arbitrary, which in many ways explains the conclusions of the World Bank, which said that Iran's system of social welfare is inefficient and in fact many Iranians receive benefits from the system who are in fact not even below the poverty line because the bonyads, the foundations, their criteria are arbitrary and in many cases they reward with social welfare families who are politically loyal to the regime rather than hard facts of demonstration of actual economic need or poverty.

The bonyads, these foundations, actually account for about an estimated one-third of Iran's GDP, and I would argue that they distort normal market forces in Iran.

In many cases, they have these bonyads that because they are so politically well connected have cornered entire segments of the market for import or export of certain goods and have developed monopolies in some of these goods, trading in some of these goods.

Iran's economy fundamentally is a trading economy. Iran really doesn't manufacture really anything, much of anything. Except maybe carpets. It runs on trading, buying, selling, markup discount. That is Iran's economy essentially.

The most controversial allegations about these bonyads is whether or not their funds have been used, because they are not really under any ministry, as a sort of a circuitous way to generate extra funds to procure weapons of mass destruction technology and other technology.

This allegation has long surrounded the largest foundation, the Foundation for the Oppressed and Disabled, which has constantly been run by hardliners and former officials of the Revolutionary Guard, including Mohsen RafiqDust, who was the first minister of the Revolutionary Guard. It is now run by a former chief of the Revolutionary Guard, Mohammad Forouzandeh. The Foundation for the Opressed is so large it manages broad assets, 400 companies and factories, with a total estimated asset value of about $12 billion, and it is considered the largest single economic entity after the government itself.

It is active in the following sectors: Food and beverages, chemicals, shipping. The bonyads shipping company, metals, petrochemicals, construction, dams, tours, farming, horticulture, animal husbandry, tourism, transportation, hotels, two major hotels in Tehran, commercial services, financing. It produces the best selling soft drink in Iran called Zam Zam. It uses profits—it does, however, provide social welfare. It helps about 120,000 poor families and veterans of the Iran-Iraq war.

Another foundation based in Mashhad in northeastern Iran is the Shrine of Imam Reza Foundation. It uses donations from 8 billion pilgrims to the shrine—it has used that to buy up to 90 percent of the arable land in its area. The estimated value of this land could be as much as $20 billion, and it is the largest employer in Khorasan province. It runs 56 companies, including a Coca-Cola factory and two universities and is now getting into automobile manufacturing.

It is headed by Ayatollah Abbas Vaez-Tabasi, who is on the powerful Expediency Council that is headed by former President Akbar Hashemi-Rafsanjani, who lost the Presidential election in 2005. His son is married to a daughter of the Supreme Leader Ayatollah Khamenéi.

The Noor Foundation imports sugar, pharmaceuticals and construction equipment and has substantial real estate holdings. It is headed by Mohsen RafiqDust, who was the first Minister of the Revolutionary Guard and who later was head of the Foundation of the Oppressed. RafiqDust is on the Expediency Council.

The last foundation I would like to mention is the 15 Khordad Foundation. It is the bonyad, the foundation, that offered the $1 million to anyone who would kill author Salman Rushdie, and the bonyad has not—although the government has said they have no issue with Rushdie any more, the 15 Khordad Foundation has not actually rescinded that offer for the killing of Rushdie.

A few other elements of the economy, the political economy, I want to mention. The cooperatives, another sector of the economy. The most well known is the Rafsanjani Pistachio Growers Cooperative run by the cousin of Mr. Rafsanjani, again, who is chairman of the Expediency Council. The cooperative represents about 70,000 pistachio farmers and has a large estimated value of $746 million. Many believe it was Rafsanjani's wealth from the Rafsanjani cooperative that has led him to prominence and has allowed him to pay off supporters although it did not carry him to victory in the 2005 election. He still lost to Mahmoud Ahmadinejad.

The Revolutionary Guard. I have done a lot of work on the Revolutionary Guard in my career. Very loyal to the leadership. Increasingly playing an economic role. As we have seen, it is getting its tentacles into the economy, and in fact a firm owned by the Revolutionary Guard called Ghorb is being awarded a $2.3 billion a year deal to develop two phases of the large South Pars gas field, which is Iran's large natural gas project. That project was going to be awarded to Norway's Aker Kvaerner, but the Guard, using its political influence, overturned that. It was retendered and it was won by this arm of the Revolutionary Guard. Again, and certainly Ghorb is much less capable of developing the South Pars gas fields than Norway's Aker Kvaerner. So this is another way of how the Guard and the regime have basically captured, cornered large parts of the economy.

The implications for reform are clear. There is a big debate in Iran over reform because the conservatives are very divided. I will conclude with that. Ahmadinejad really represents the lower class. He believes in state control of the economy, that the state should drive employment. Other conservatives such as Rafsanjani, they represent the bazaaris, the traders. They are really almost in many ways pure capitalists. They want very few restrictions. They want to be able to trade in and out freely and mark up their goods. They don't want state control of the economy. And they don't want really foreign investment in the economy because if foreign investment comes in the investor from a multinational company will probably make a better product than they do or do a better job than they do and will displace their monopoly. So the bazaaris want to keep out foreign investment.

So in many ways, considering sanctions on investing in Iran outside the energy sector may not necessarily be unpopular in major segments of the Iranian leadership because, as I said, the bazaaris don't want this investment anyway because it will hurt them.

So in summary, I see very little prospects for political reform. I think the structure of the system is the way it is. It allows the clerics to build patronage to control their supporters, to keep people loyal. And I think the system serves that interest, and repeated efforts to reform have been thwarted.

Thank you.

[The prepared statement of Mr. Katzman appears in the Submissions for the Record on page 45.]

Representative Saxton. Thank you very much, Mr. Katzman, for those important perspectives. We appreciate it.

Mr. Berman.

STATEMENT OF ILAN BERMAN, VICE PRESIDENT FOR POLICY, AMERICAN FOREIGN POLICY COUNCIL

Mr. Berman. Thank you very much, Mr. Chairman. Dr. Katzman spoke about the Islamic Republic's political economy and I would like to talk about economic avenues that are available for the United States and its allies in confronting Iran. Let me focus my oral remarks on three vulnerabilities or, if you will, points of entry into the Iranian economy by which we can exert pressure. And I do this in order of escalating effectiveness, at least in my opinion.

The first is foreign direct investment. Iran today produces 3.9 million barrels of oil a day, and exports 60 percent of that, approximately 2.5 million. In order to maintain this level of production, it requires approximately $1 billion of FDI, foreign direct investment, annually. In order to increase that capacity, Iran requires approximately $1.5 billion. In context, though, this is not a lot of money. Iran has signed contracts worth dozens of billions of dollars with foreign powers over the past several years.

China alone has signed at least two massive exploration and development deals with Iran worth a cumulative $100 billion over 25 years since 2004.

As a result of this trend, Iran is no longer an economic pariah the way it was in the mid to late 1990s. It now has very vibrant economic ties with a number of foreign countries. And Iran has amassed huge amounts of money as a result of the high price of oil. The average cited in the Iranian press is that Iran has approximately $50 billion in hard currency reserves as of March of 2006, the end of the Iranian calendar year.

What does this mean? This means that legislation such as the Iran-Libya Sanctions Act which we have in force and is coming up for renewal next week, even if there are a political will to implement it more fully, will not be able to alter Iranian behavior by itself. There is simply too much hard currency that the regime could tap into and there are too many foreign factors who are invested who would act. Iran will find a billion dollars, or a billion and a half, somewhere. What the United States can do is try to complicate where Iran gets its foreign direct investment from, and force them to draw from their hard foreign currency reserves. I would argue that is a worthwhile effort, because if Iran has less money available for its nuclear program, for terrorism, or for interference in Iraq, that is an aggregate benefit for American foreign policy. However, this is not by itself a solution to the nuclear issue. We should not rely just on curbing FDI.

The second weakness is the economic hierarchy that exists in Iran today. The vast majority of regime wealth is concentrated in a small number of people. For example, as Dr. Katzman alluded to, the extended family of former Iranian President Ali Akbar Hashemi Rafsanjani virtually controls copper mining, pistachio trade, and a number of profitable export and import businesses. And parallel to that you have the bonyads, the regime's sprawling charitable foundations. They are largely unregulated, accountable only to Iran's Supreme Leader. And they account for 20 percent or more of Iranian national GDP, and as much as two-thirds of the country's non-oil GDP.

So there is a substantial financial base that can be targeted which has very deep ties to the regime. Targeted financial measures that restrict the ability of these individuals and organizations to access international markets and curtail their ability to engage in international commerce are likely to have an immediate and pronounced effect on regime decisionmaking. This is a large domestic constituency and there is likely to be a lot of domestic pressure exerted on the Iranian government if these people can no longer live in the manner to which they have become accustomed.

But the most solid point of entry, in my opinion, is commodities. Iran maintains a socialist energy sector. Gasoline is sold for pennies on the dollar. It costs approximately 40 cents to buy a gallon of gas in Tehran today. Iran consumes 64.5 million liters of gasoline a year and it imports close to 40 percent of that. More importantly, it does not have the equivalent of a strategic gas reserve. There have been studies out of Iran that suggest Iran only has a 45-day supply of gasoline "in country," after which there will be shortages at the pump in a very destabilizing manner.

So on this issue, it is my opinion that economic pressure can work. We are already beginning to see this. Sanctions have not yet been applied in any way, but leading parliamentarians in Iran have already told the government it needs to spend an extra $5 billion this year alone to maintain its established policy of deep subsidies and avoid rationing. It is quite clear that this international climate is creating additional fiscal requirements for the regime to maintain state subsidies, and we can exploit that. That is a point of entry for us.

But none of this is occurring in a vacuum. Iran is already making very substantial economic countermoves.

First, Iran has carried out large scale transfers of financial assets from Europe to institutions in China and Southeast Asia, where the belief is they will be less likely to be exposed if sanctions are applied.

Second, the regime has begun the initiation of a large scale privatization of government funds, transferring to offshore accounts, transferring into private hands, selling off gold reserves, things like that.

And most importantly, and I think this needs to be emphasized, the regime about a month ago passed a new budget which goes into effect over the next several months which calls for a halt to imports of refined petroleum projects and gasoline rationing beginning this fall.

These are all efforts to minimize economic vulnerabilities on the part of the Islamic Republic, and they are an attempt by Iranian leadership to deny the West the ability to influence Iranian behavior, specifically on the nuclear issue.

Therefore, and I say this advisedly, the sanctions track that we are currently pursuing at the United Nations is likely to be ineffective. First of all, we have a problem with timing. The delays that we have experienced so far—and are likely to experience moving forward—allow the regime time to make these economic countermoves that will make sanctions, when they are applied, likely to be less effective than they are today.

And the second is a problem with scope. There is a need to appease the stragglers in our economic coalition. The Russians and the Chinese have made no secret of the fact that they are very hesitant to apply economic sanctions. Therefore, any measures that emerge as a result of the U.N. track will need to be tailored to make sure that they don't warrant a Chinese or a Russian veto. It means they are going to be narrow in scope.

My conclusion here is that, unfortunately, the way the Administration is currently pursuing economic policy toward Iran will virtually guarantee that sanctions will fail. In my opinion, what the Administration needs to do, and needs to do in short order, is to create a "coalition of the willing" with which it can go outside the confines of the U.N. and focus on those measures that will be most effective in changing Iranian behavior.

I say all of this advisedly because it is not guaranteed at all that sanctions will work. In fact, the political will of the regime to acquire a nuclear capability is very strong and historically, sanctions are not an isolated event. They tend to have a very strong positive correlation with escalation to the use of force. But I think sanctions are a step that should be attempted because if we don't, and we acquiesce to the current U.N. track, this will make other options, chief among them the eventual use of force, either by us or another country, all the more likely.

Right now, we still have the ability to attempt to use economic pressure on Iran to slow down and to curb Iran's atomic ambitions. A year from now, it is not at all clear that we will have that opportunity.

Thank you.

[The prepared statement of Mr. Berman appears in the Submissions for the Record on page 50.]

Representative Saxton. Thank you very much, Mr. Berman. We move now to Mr. Davenport.

STATEMENT OF DR. ANDREW DAVENPORT, VICE PRESIDENT, CONFLICT SECURITIES ADVISORY GROUP, INC.

Dr. Davenport. Mr. Chairman, thank you for the privilege of appearing before this Committee. I would like to speak first about the central role that Iran's oil and gas industries play in supporting all facets of Iran's government and then focus my time on the company specific dimensions of that equation. I will also touch on the impact of U.S. policy on corporate decisionmaking regarding the pursuit of these business opportunities.

In our view, three central issues define Iran's oil industry today. First, it is clear that Iran's oil exports play a key role in underwriting that country's government. As oil prices increase, Tehran experiences economic windfalls that have a direct impact on the government's discretionary spending across the board.

Second, despite the lucrative nature of Iran's oil exports, its energy industry as a whole has distinct weaknesses that have prevented it from reaching its full potential. Iran's oil industry is state controlled, aging, inefficient and in need of significant upgrades that only foreign companies with their access to large-scale capital and advanced equipment technology are capable of providing. These upgrades and foreign investments are essential for Iran to cushion the blow of increasing domestic oil consumption and aging oil fields that, together, are putting downward pressure on the country's oil exports.

Third, the country's gasoline related expenditures have put added strain on Iran's budget. Despite booming revenues, Iran's lack of refining capacity has forced the country to spend billions of dollars importing gasoline. Moreover, the decision by Iran's parliament to lock domestic gas prices at 2003 levels has led to billions more dollars in state subsidies.

Over the coming years, the intersection of these three industry pressures will put the Iranian government and the companies that do business there at a crossroads. With Iran almost completely dependent on its energy exports for its revenues and in desperate need of foreign investment to keep these revenues flowing, foreign companies will become even more central to the prosperity of Tehran than they are today.

The summary statistics regarding the role of oil in the Iranian economy tell the story. Iran holds an estimated 10 percent of the world's proven oil reserves. Its oil exports generate 80 to 90 percent of the country's total export earnings and 40 to 50 percent of its total government budget.

Although the state-owned National Iranian Oil Company largely runs the country's oil industry, we understand that oil export revenues are effectively funneled straight to the country's central bank. As might be expected, oil related revenues quite literally equate to discretionary funds for Tehran. Although Iran's military and nuclear spending is largely unknown, it can be reasonably expected that both are benefiting directly from recent oil windfalls.

To maintain these high revenue flows, however, not only will oil revenues need to remain high, but Iran will need to invest heavily in its existing and prospective energy projects. Most would agree that the future success of Iran's oil fields requires billions of dollars in foreign investment capital and technology in the coming years.

Our research shows that there is no shortage of corporations currently working in Iran's oil industry. In our view, even considering the outrageous pronouncements of Iran's new President, short of international sanctions, no significant number of companies will forgo the country's business opportunities. History has shown time and again that companies will do what the law allows. As long as operating in Iran is legal, the draw of a growing economy and the country's vast oil and gas resources will lure them in.

There are a few important exceptions. A number of companies have correctly identified a growing sensitivity in the U.S. investor community to business associations with Iran. The prospect of being labeled as, quote, "doing business with the enemy," unquote, the title of a 60 Minutes segment that has aired twice over the past 2 years, has influenced the behavior of some companies. For most companies, however, this calculation is still in flux.

For at least five prominent U.S. companies, Comptroller William Thompson of New York City made this calculation a good deal easier by registering public shareholder resolutions with the SEC on behalf of the city's fire and police pension funds calling for a board level review of their corporate ties to Iran and other terrorist sponsoring states.

After some wrangling, these companies made adjustments to corporate policies and in certain cases renounced any future business ties to Iran whatsoever.

The impact of corporate reputational concerns and market forces, however, should not only be measured by whether or not a company chooses to exit completely from Iran. One positive development stimulated by these concerns and increased attention to this issue from investors, the government and the media in the U.S. has been a new sensitivity to the structure of their corporate ties to Iran.

Some non-U.S. companies have begun to self-police their operations at standards above and beyond the requirements of their national laws to protect their reputations from potential Iran-related harm. For example, companies are substituting equipment and technology to minimize dual use concerns and in some cases posing questions regarding certain local partners. In fact, our firm is witnessing corporations insisting on certain contract terms with Iran rather than vice versa.

While this may be short of what some policymakers prefer, it demonstrates an innovative market oriented reaction that has a high likelihood of reducing the security risks that these corporate ties can represent. In our view, this increased security consciousness, when it occurs voluntarily, should be viewed as a good thing.

Given recent events and the importance of foreign companies to the Iranian economy, one might ask: What role does U.S. policy play in the considerations of these companies operating in Iran? For a long time, the answer for non-U.S. companies has been very little. President Clinton's 1995 Executive Order banned U.S. involvement in Iran's energy sector, but had little to no impact on foreign companies.

Congress then passed the 1996 Iran-Libya Sanctions Act, or ILSA, which sought to sanction non-U.S. companies investing more than $20 million annually in Iran's oil and gas industries by restricting their access to the U.S. economy. ILSA, however, was never enforced. Soon after the act was passed, several large companies, including France's Total and Russia's Gazprom, violated its provisions and following an official review went unpunished. These early precedents cleared the way for other companies to do the same and, today, there are over 20 companies in technical violation of ILSA.

With U.S. sanctions policy toward Iran remaining fairly consistent since the mid-1990s, one might further ask: What has changed over the past few years causing changes to corporate behavior that we have been witnessing?

Our findings demonstrate that after September 11th the stigma associated with corporate ties to terrorist sponsoring states increased significantly. This stigma reverberated in the local and national press. State and municipal governments began analyzing how their retirement and other public investment funds were invested in these companies. Grassroots attention to state sponsors of terrorism raised substantially the reputational risk of these corporate ties.

This grassroots movement continues today. For example, in Missouri, an investment trust just recently became the first public fund in the country to institute a policy that, after careful review, screens out certain companies with business in Iran and other terrorist sponsoring states. A so-called terror free mutual fund, the Abacus Bull Moose Growth Fund, has likewise been created in response to market demand. As a result of this trend, some companies are rightfully seeking to safeguard their corporate operations from these types of associations. To be clear, this is market oriented cause and effect.

According to our Global Security Risk Monitor online research product, over 300 public companies have carried out business with Iran during the past 3 years.

As stated, short of strong multilateral sanctions, there will continue to be companies looking to enter the Iranian market or expand their corporate presence. As reputational risk increases, so too will corporate self-policing. Such new corporate governance guidelines and due diligence measures will not be lost on the state-owned companies that will have to learn to be responsive to the reputational burden that they bring to each of their prospective and existing business partners.

Thank you.

[The prepared statement of Dr. Davenport appears in the Submissions for the Record on page 54.]

Representative Saxton. Thank you very much, Dr. Davenport. Mr. Schott.

STATEMENT OF DR. JEFFREY J. SCHOTT, SENIOR FELLOW, INSTITUTE FOR INTERNATIONAL ECONOMICS

Dr. Schott. Thank you very much, Mr. Chairman. I appreciate the opportunity to testify before this Committee.

My testimony today draws on my personal experience as a U.S. Government official involved in the formulation and implementation of sanctions policy back in the late 1970s and early 1980s and since then also as a researcher who has spent 25 years documenting the use of economic sanctions around the world with my colleagues Gary Hufbauer and Kimberly Elliott. We have probably produced the most extensive study of the use of economic sanctions, analyzing where they can be successful and their limitations. I hope that that analysis will help the Committee in its deliberations and the Congress as it pursues legislation in the coming weeks.

There has already been very extensive discussion of Iran and sanctions and petrodollars. The questions that were raised by you and the other Members of the Committee in the first panel were very insightful, and I will try not to duplicate that discussion.

But there is an important point to bear in mind. Iran now pockets about an extra $30 billion of oil export revenues annually compared to a decade ago. And these oil profits, as has been said in this panel, fuel the Iranian economy. They also finance Iranian investment in weapons development and support for terrorism.

What is good news for the ayatollahs is not good news for the United States. We are paying for these developments and not just at the pump. Petrodollars make Iran more capable of pursuing its nuclear ambitions and funding Hezbollah and other terrorist organizations and, importantly, it makes Iran more immune to U.S. economic coercion. I have some differences with comments that have been made about the effectiveness of expanded sanctions, in part because I have concerns about the viability of stronger multilateral support for our initiatives.

We have had sanctions for several decades, as Mr. Hinchey implied in his question in the opening panel. Fortunately, one only has to look back 22 years to the bombing of the Marine Corps barracks in Lebanon and the sad fact that our Marines had to return to Lebanon for the first time in 22 years just the past week or so to help the evacuation of U.S. citizens.

That led to sanctions against Iran for the first time since the hostage crisis of 1979 to 1981; it put Iran on the list of state sponsors of terrorism where it belongs and where it has remained for the past 22 years. We have had extensive unilateral sanctions. We have had very modest international support for those sanctions. And as a result, we have not achieved the very ambitious, difficult objectives that our sanctions policy has sought.

Now the question is, what more can be done? I think that question makes this hearing very timely, very important. But there is no easy answer to the questions that you have raised this morning.

In the interest of time, I will just note that in terms of our past sanctions policy I have appended to my statement a chronology of key events in the decades long sanctions efforts. If you read that, it will be troubling, because it goes back over many events that now resonate in the headlines of the newspapers that we read everyday. It is like Yogi Berra said, it's like deja vu all over again. The same problems confronting U.S. policy two decades ago now dominate the headlines.

Funding of terrorists in Lebanon. Testing North Korean missiles and Iran's pursuit of nuclear weapons. Economic sanctions have not blunted Iran's foreign adventurism in these two decades although they have undoubtedly inhibited the task and made it more costly to pursue.

Now the Congress is considering the extension or expansion of the ILSA sanctions against Iran. I think that law should be extended, renewed as is. But we should be careful to assess what can be done through the use of sanctions.

Can sanctions stop Iran from eventually developing a nuclear weapon? I don't think so. We have let the cat out of the bag in our reactions to developments in India and Pakistan. I fear any Iranian government would follow similar nuclear ambitions because—for them—the issue is one of nationalism. Even if the ayatollahs were not in power, leaders in Iran would feel that nuclear weapons will bring them regional dominance and that, just like with India and Pakistan, the West will accept their accession to the nuclear club without significant retribution.

Nonetheless, history shows that targeted sanctions can push back that day of reckoning. India, Pakistan and North Korea have all been subject to very extensive sanctions and some multilateral measures. The sanctions did not prevent proliferation but collective denial by Western powers of key ingredients of the bomb maker's art—the reprocessing technology, centrifuges and the like—substantially slowed the process.

I have studied a lot of sanctions, and I know that there are lots of ways you get around sanctions. Sanctions will not prevent a determined and a well financed country from eventually crossing the nuclear threshold. Even the tightest sanction regime can be evaded with sufficient incentive.

Saddam Hussein showed that during his reign when billions of dollars were smuggled into Iraq, sometimes with the complicity of Iran. Land borders are porous, especially in the Middle East, and sea and air freight are difficult to monitor effectively without intense military operations. With Iran's petrodollar bonanza, it will be able, over time, to procure the necessary material and technology to achieve its nuclear ambitions. This is a sad reflection and we ought to be planning how to deal with this.

The comments that were raised earlier that we should ratchet up the sanctions cause me some concerns, because this is not the same situation we had back in the 1990s when ILSA entered into force. Given tight global supplies, Iran has greater leverage to counter sanctions from major oil consuming nations and it can counter sanctions in several ways. One is by cutting back its level of oil exports. It doesn't have to cut them off. It can just reduce a bit. It can do non-oil related measures by racheting up tensions in the Middle East, as it is now doing in Lebanon, and it can also do the same in Iraq and perhaps they are doing it at the same time.

Few producing nations have the spare capacity to offset potential Iranian cutbacks, so prices would likely rise sharply. Now, as you implied, Mr. Chairman, and Mr. Simons implied in his answer to you, you could utilize release from the Strategic Petroleum Reserve. It is not an automatic process, especially if you want an internationally coordinated action using the IEA's emergency sharing plan. I sat on the governing board of the IEA as part of the U.S. delegation trying to do that in 1980, 1981, and it was a difficult process. We ended up doing nothing. The crisis was over before there was international agreement to take action. Prices went up and then they went down as a result of the global recession.

That may be a satisfactory response, but in the short term certainly Iran will sell less and earn more. For that reason, there are a lot of politicians who find it hard to stomach the idea of more comprehensive sanctions, because of its short-term impact on prices, and because it would undoubtedly trigger at least in the short term a global recession.

Europe, China, and Japan have similar concerns and are likely only to follow a very modest path of sanctions escalation. Russia will be even more ambivalent and so will China. The Russians have gained a lot from the oil price spikes that have already been generated by Mideast tensions. They are one of the world's major oil producers and indeed they increased their production over the last decade, and they also want to continue to cultivate Tehran as its best foothold in the Middle East. I would be very wary of thinking we will get strong support in multilateral actions from the Russians.

So what should we do? Let me conclude with a brief commentary. I think the most immediate and obvious task is continued denial of critical components for Iran's nuclear industry. The policy already receives support from major powers, but there is a lot of leakage that comes in from second tier powers and we ought to be concentrating our diplomacy on getting those states to try to join in the broader sanctions effort.

Other targeted sanctions against Iran's ruling class should also be considered. I think these are more for annoyance—measures such as travel restrictions and overseas asset freezes—but Dr. Katzman perhaps can comment more on the impact that they would have on domestic Iranian politics.

But the strategy of limited sanctions accompanied by coordinated diplomacy is not going to achieve the result of denying Iran eventually its objectives. It will only delay the process. Hopefully, over time, that delay will mellow Tehran's nuclear ambitions. This is less than a satisfying result, but effectively what we can achieve given current conditions in world energy markets.

Thank you very much, sir.

[The prepared statement of Dr. Schott appears in the Submissions for the Record on page 58.]

Representative Saxton. Thank you very much, Dr. Schott. That was a very good statement and we appreciate it very much. You each heard Dr. Schott, other panelists, obviously heard Dr. Schott talk about the effectiveness or potential effects of sanctions. Within the context of what Dr. Schott had to say, Mr. Davenport and Mr. Berman and Mr. Katzman, would you just kind of respond and give us your thoughts relative to the context within which Dr. Schott put the subject?

Dr. Davenport. I will do my best. I would have to say that from our perspective, we spend a lot of our time, the company that I represent, researching which companies from around the world are doing business in Iran and what they are doing there and hence the focus of my testimony on the importance of those companies to the country's economy. And I think it has been supported really in the testimony of some of the other witnesses that, at present and for the future, the Iranian oil economy is going to be highly dependent on the investments of foreign companies. That is really how they are going to keep up their current level of revenues and how they are going to keep producing more and more oil in order to compensate for currently aging oil fields and their increasing domestic consumption. As long as that is happening, I think you are going to see Iran's economy, short of oil prices falling, continuing along apace even with U.S. sanctions in place.

So I believe that what would affect Iran's economy most substantially would be international sanctions, if they were to occur, or a severe drop in the price of oil. I think these vulnerabilities show increasingly as Iran ramps up its budget and gets rather spendy with the current oil-related revenues that they are experiencing. I believe they have a budget deficit currently, even given the enormous windfalls that they are experiencing from today's oil prices. So I think either oil prices fall or international sanctions are put into place and those are the two biggest things that I see having a negative impact or significant impact on Iran's current economic situation.

Representative Saxton. Thank you.

Mr. Berman.

Mr. Berman. Thank you very much. I tend to agree about 50 percent with Mr. Schott, and let me explain why. He is exactly right in terms of goals. Economic sanctions cannot change the calculus of the Iranian leadership. It is very clear that Iranian officials have made a strategic choice in favor of nuclear possession, and they also have made clear that they are willing to stomach very painful economic measures inflicted upon them from the international community in order to achieve their goals, in order to perpetuate policy. But let me draw in something that hasn't been mentioned so far yet today.

The goal of sanctions should not be to stop the nuclear program. If that is the goal, then we have already failed. We have failed before we started. The goal, rather, should be to impress upon the Iranian people, the 85 to 90 percent of the Iranian people that are disenfranchised from the government, that their ruling regime's goals have concrete economic consequences, because the one thing that is very important here is the degree to which economic measures are not done in isolation. They have a diplomatic component. The most important component here is in order to accentuate the effectiveness of sanctions is to deny the regime the ability to rally the people around the flag, and that means that any economic measures have to be coupled with very robust public diplomacy that talks about the concrete consequences of their regime's adventurism.

The second point is on Iranian oil power, and about what can Iran do. Is it likely to expect an oil trade disruption? I think there are a couple of factors that mitigate strongly against that. The Iranian regime has blustered very publicly that it will reduce the flow of oil from the Persian Gulf. That they will cutoff the flow of oil from the Strait of Hormuz. And they have the capability to do that, certainly, but it is useful to remember here that Iran is dependent on less than savory countries, which are its primary customer base for energy. And it is very clear that if Iran is no longer on the table, countries like China and countries like India will waste no time in finding other, more stable suppliers.

The second point is that if Iran begins fiddling with the "oil tap," this will do something that so far American strategy has not been able to: to galvanize an international consensus about the need for a fundamental change in Iran. Many countries that are very dependent on Iran for oil will simply not stomach someone tinkering with a passageway through which two-fifths of the world's oil trade passes. I think the goal of their bluster is to have us self-censor, to have us think about what the costs are. But it is a very far cry for them to be able to do that. In fact, I think they understand that doing so in a very robust fashion might actually be regime threatening.

Representative Saxton. Mr. Katzman.

Dr. Katzman. My view is that Iran is single mindedly determined to achieve a nuclear capability and they will not be deterred by economic measures. In the Iranian view of Iranian strategists all across the spectrum, the reformists, the hardliners, every type of hardliners, Iran has been humiliated by outside powers throughout its history. It has been criss-crossed by every invader imaginable. The only way to reverse this sense of vulnerability is to achieve a nuclear capability, in which case they would no longer be vulnerable in their perceptions to this type of manipulation, in their view, by outside powers. I believe they can endure substantial economic privation.

Remember, Iran I think—I believe there is a perception in Washington, popularly here in America, that the Tehran elites are Iran. That is not Iran. Iran is rural villages, very poor. It is not a rich country. It is not a really well educated country. In Tehran there are very well educated elites who would be quite harmed and quite injured by economic privation. But the vast majority of Iranians are used to economic privation their entire lives, and I don't personally believe that any sanction will deter them from this course of pursuit.

Thank you.

Representative Saxton. Thank you.

Mr. Hinchey.

Representative Hinchey. Thank you, Mr. Chairman. Gentlemen, I want to thank you very much. I think your insight today that you provided us is very valuable and I wish the entire number of the Members of the House of Representatives could have been here to hear you. I think it would have been very beneficial.

Have any of you been to Iran recently? Not recently. Any of you been to Iran at all? I think that is a major problem, and I don't say that in any way to diminish what you just said. I think what you just said is very, very valuable and I don't mean to diminish it at all. But I just ask that question inquisitively because there is very little contact between our countries, any real, any meaningful contact between our countries, and the situation has gotten worse over the course of the last 25, now almost 30 years.

Mr. Schott, you said that a lot of people, politicians particularly, have a difficult time stomaching sanctions. I think that is right. I have a hard time rationalizing when you look—when you look back on the history of our involvement with this country, it seems to have been deplorably unsuccessful, and it is because the relationship has been a very aggressive one and the aggression has been primarily from our side. I can remember, you know, when I was a very, very young man watching television news programs over the weekend where the Shah of Iran was the principal guest and at that time Iran was a major ally and close friend of the United States through the Shah. But the Shah, over time, became less and less popular within his own country and when that happened back in the Carter administration, we reacted in a favorable way toward the Shah and an unfavorable way to the people who opposed him, and that was really the beginning of the decline of this relationship.

And it is an unfortunate situation, because I think that the people who are making policy could very much benefit from the insights that you provide. I don't know what kinds of opportunity you have to talk to this Administration or particularly to the State Department. I hope it is—I hope that you do have the opportunity because I think that there could be a great benefit from that kind of interaction.

But I would just like to ask you ask one question basically. The approach that we have taken to Iran has been very unsuccessful, seems to me completely unsuccessful. The likelihood of the situation improving under the present set of circumstances I think is remote. The response of the Iranian people to the actions that we have taken with regard to their country has been very reactionary. They have increasingly elected more and more reactionary leaders who are increasingly hostile to the United States and to other countries, particularly Israel. So the circumstances that prevail today are worse than they were 10 years ago, substantially worse than they were 30 years ago.

Everything that we have done has made the situation worse. Well, I don't know about everything, but most of the things that we have done has made the situation worse. What is it that we should be doing to make the situation better?

I think it was Mr. Berman who said he didn't have an opportunity to talk about diplomacy in his opening remarks. Seems to me that that is exactly the problem we all have. None of us have had an opportunity to talk very much about diplomacy, let alone to engage in a serious diplomatic initiative with this very significant country. So I would appreciate anything that you might care to respond to that. Dr. Katzman, if you would like to begin.

Dr. Katzman. Well, I would just begin by saying there has been engagements and actually in the last 4 years there has been substantially more engagement with Iran than ever before. Actually in 2003 for the first time the two countries acknowledged that they were conducting an open dialog. During the Clinton administration there had been talk about what the conditions might be for entering a dialog with Iran. But the last 4 years we have actually had a dialog with Iran, starting with Afghanistan, and Iran was extremely helpful in putting together the Karzai Government at the Bonn conference in late 2001. And then there were talks with Iran on Iraq and how Iran might be helpful.

Representative Hinchey. What you have just said is absolutely true. Iran was very helpful with regard to Afghanistan and that was very important to us because Afghanistan was the appropriate focus of our attention at that particular moment. What strikes me as—what is difficult for me to understand is why we allowed our relationship to deteriorate with them after they had been so helpful to us in Afghanistan. I was in Afghanistan in December of 2001. I had a chance to see what was going on there. I understand the kind of things that Iran and other countries did working closely with us. Why then did the President say, for example, in his speech just a couple of months later, a month later, that Iran was part of the axis of evil?

Dr. Katzman. Well, the Iranians point to that as something that bothers them greatly. But I would also say the dialog was suspended in May of 2003 when al-Qaeda activists who were in Iran were responsible for the bombing of a big housing complex in Riyadh, Saudi Arabia. Sayf al-Adel and bin Laden were believed to be in Iran possibly under Iranian protection there.

Representative Hinchey. You take a big jump in time between 2001 to 2003. The curious question is what did we allow to happen or what did happen in that intervening period that caused the situation to deteriorate, sir?

Dr. Katzman. There were—what I understand is there was consideration of building on the Afghan initiative, the Iraq initiative. But there was a sense that Iran was still doing things we found objectionable such as the nuclear. Remember in 2002, late 2002, the evolution of the major nuclear sites was unveiled. So while Iran may have been helpful on Afghanistan and Iraq, we had this other track happening where it suddenly became apparent that Iran was much more advanced in its nuclear program than we had previously thought, and that might have factored in to why this dialog was not built on.

Mr. Berman. A couple of points. You made the case that our approach has been spectacularly unsuccessful. I would argue that in fact we haven't had much of an approach at all for the last 8 years, 10 years. What you have actually had in Washington is two competing camps. One thought that we could do business with the Iranian government. On the other side, you have people that said this is a government that is unreformable and we simply can't talk to them. And the result of that clash, predictably, has been policy inertia. I think that it has actually affected some of the things that this Administration has done. The legacy is still there.

So I would say that your point is well taken, but I think it might not be because we have tried everything at our disposal. It might be because we are butting heads with ourselves.

The second point: You made reference to the election of Ahmadinejad, and I think the more appropriate term here is selection. What is important to remember is that there were two Presidential run-offs, one in June and one in July. But 3 months before that, in March, the Iranian government's vetting authority excluded more than a thousand potential candidates for President. The eight that remained, who participated in the first round, might have talked a different talk, but they all walked the same walk. None of them were going to pursue policies that were going to be threatening to the Islamic Republic. And in the final stage in the run-off between former President Rafsranjami and Ahmadinejad, it is important to understand why the latter won. He won on a campaign that was populist. It was against corruption, basically pointing to his people and saying, "These people have robbed you, the Iranian people, of your deserved wealth. Stick with me and I will make it better." He hasn't, and this is where there is an opportunity for the United States. Ahmadinejad for the last year has had the opportunity to pursue very populist policies. And he has done some of that tinkering on the margins of agrarian reform, etc. But what he hasn't done is reconstruct, as he promised to do, the relationship between the government and the people in terms of trickle-down economics, if you will.

That is an opportunity for the United States, because if Iranians substantively are still economically disenfranchised from the government. But that doesn't mean they will be in the future. If the Iranian regime begins implementing some of these policies, you will see a fracturing of that base of Iranians that right now does not see any economic opportunity for them in the perpetuation of the Islamic Republic. But so far, this hasn't happened.

Dr. Davenport. I will have to defer to some extent to other witnesses here since the company that I represent is impartial and doesn't take policy positions on the research we perform.

But what I would like to say is whether or not you would agree with the current track of the Government here with respect to Iran, what we are witnessing in the private sector is a number of Americans at the local level, and most notably in the investment community taking, matters to some extent into their own hands via a form of what has been called, in the past, socially responsible investing, also termed values-based investing, based on their own opinions of what is going on in the world. In some cases, where American policy and regulatory regimes can't reach, these investors are taking actions with respect to U.S. and foreign companies doing business in Iran, taking a look at exactly what they are doing there and deciding for themselves whether or not they want a part of it. And in some cases, they are screening out these companies altogether. And I think that is becoming an element in the international dynamic as that community grows.

Dr. Schott. As in the first panel, Mr. Hinchey, you have put your finger on the key question: Is U.S. policy making things better or moving us toward meeting U.S. objectives, or is it making things worse? And I strongly disagree with some of the commentary on this panel that we haven't had a policy. We have had a very clear policy dealing with a very difficult and volatile situation.

The policy started, as you rightly mentioned, back in the 1970s when we played Iranian politics the wrong way, ended up in the hostage crisis, and we used economic sanctions very intensively and ultimately somewhat successfully to provide bargaining chips to get our people home after 440 days.

But that created a sense of tension and animosity that carried over. Clearly, the Iranians had the capability to export their adventurism, and they did so, and that led to the sanctions regime starting in 1984.

That was manageable. We followed a policy of containment as opposed to a policy of military response. And given the situation in the Middle East, given the lack of strong multilateral support back in the 1980s and the 1990s, and even today, it probably was the best of a bad set of options to follow.

Any containment policy is going to have tensions among domestic groups. There is going to be cheating. There is going to be those who say, well, we have military means, let's use them, though it is hard to figure out what the next step will be after you begin a military response, even if it is a limited bombing raid.

And so the policy of containment in the 1980s—and essentially that has been the policy under ILSA, to limit the growth of the Iranian industry—has been successful. Iran still produces about the same amount of oil, but it hasn't been able to take further advantage of its natural resources.

We now have a much more difficult international environment in which to pursue our policy. The global oil supply demand balance is very tight, and that has contributed to the financial windfall that the Iranians now benefit from that gives them a lot more margin of flexibility for pursuing domestic and international policies.

It also, as I said in my statement, ends up constraining the impact of economic coercion against them. That is why I think we have to continue a policy of containment. I think we can try to sharpen it in some areas, the narrowly targeted areas of componentry and technology useful for the nuclear industry, so that we lengthen the period of time, and hopefully the global environment both economically and politically will allow us to begin to work more closely with the future Iranian government, as the policy dialog began to improve a few years ago, as Dr. Katzman said.

But sanctions are not going to be a magic bullet to solve our problems. There is a wide range of problems in the Middle East related to economics and politics that pull against a coordinated international action and I don't think we are going to see that from the Russians, the Chinese, or the Japanese in the future. They will help us a little, but you will get the type of bland statements you got out of St. Petersburg 2 weeks ago.

Representative Saxton. Thank you very much.

Mr. Hinchey, thank you for hanging in here with us.

Representative Hinchey. I thank you, Mr. Chairman, for holding this hearing, and thank these gentlemen. The insight that you all provided I find very, very valuable.

If I could just ask one last brief question, Mr. Chairman.

Representative Saxton. If it is very brief.

Representative Hinchey. Could you supply me a list of those 20 companies that violated the ILSA?

Dr. Davenport. I will do my best. I will be in touch with your office and talk with my guys.

Representative Saxton. In wrapping up here, we started this discussion a couple of hours ago to focus on the economics of the oil industry and Iran and what we can do to influence policy there, and perhaps it was a natural thing that we didn't focus on the ideology that is driving all of this. It just seems to me that a mention of that at this point might be worthwhile. It is obviously an ideology which the regime is intent on spreading. From my point of view, much of what is going on in Iraq today has directly to do with this. Much of what is going on in Syria today has a lot to do with this. Much of what is going on in Lebanon and northern Israel today is directly influenced by the policies of the Iranian regime and the other parts of the world as well.

The second thing I would just like to point out is, as I briefly mentioned earlier, it seems to me that there is a new or different attitude being expressed by various governments in the Middle East, including and perhaps not limited to Saudi Arabia and Egypt and Oman and Qatar and Bahrain and other countries that are less than anxious to be influenced by this ideology. And that perhaps as much as anything else that I have heard here today should be viewed by us and our Government as an opportunity to build with our friends, with moderate Middle Eastern countries, if you will, to try to counteract what we have been here talking about for the last 2 hours or so.

So thank you for sharing these perspectives with us. I think it has been extremely helpful to those of us who have attended today.

[Whereupon, at 12:05 p.m., the Committee was adjourned.]

Submissions for the Record

CONGRESS OF THE UNITED STATES

JOINT ECONOMIC COMMITTEE

CHAIRMAN JIM SAXTON

PRESS RELEASE

For Immediate Release
July 25, 2006

Press Release #109-86
Contact: Christopher Frenze
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OPENING STATEMENT OF CHAIRMAN JIM SAXTON

ENERGY AND THE IRANIAN ECONOMY

It is a pleasure to welcome Mr. Simons and the members of our second panel of witnesses before the Committee today. Given the course of events in the Middle East, this hearing on energy and the Iranian economy is very timely.

Iran is a country with immense wealth in the form of oil and gas reserves. Iran has the third largest oil reserves and second largest natural gas reserves in the world. Unfortunately, despite the country's great economic potential, the government of Iran has adopted policies that have undermined the country's economic development and standard of living.

Despite Iran's huge reserves of oil and gas, the Iranian regime is intent on extending its nuclear program, supposedly for peaceful purposes. However, the regime's deception regarding its nuclear program, its aggressive promotion of terrorism, and its president's recent statements concerning Israel, obviously constitute a grave threat to world peace. The facts before us today concerning Iran's large energy reserves undercut assertions by the Iranian regime that its nuclear program is needed for peaceful nuclear power generation.

Iranian leaders have also sought to intimidate oil consuming nations by threatening to cut off Iranian oil exports. However, Iranian oil exports generate a high percentage of Iranian export earnings and finance a significant portion of government spending. In short, the Iranian government and economy are highly dependent on oil exports, and threats to cut off these oil exports are not very credible.

The Iranian economy labors under a heavy burden of government mismanagement, cronyism, and corruption facilitated by government affiliated foundations and enterprises. The Iranian people pay a high price for the failures of the regime's economic policies, but the prospects for reform of these policies are bleak in the near term.

In view of the Iranian regime's aggressive behavior, the feasibility of sanctions against the regime must be considered. Iran's reliance on imported gasoline is one potential pressure point. However, the effectiveness of sanctions would depend on the willingness of a much broader group of nations acting in concert with the United States to contain Iran's threats. The coming weeks and months will reveal whether a broader attempt to impose sanctions will be tried and produce positive results.

JOINT ECONOMIC COMMITTEE
JIM SAXTON, CHAIRMAN
RESEARCH REPORT #109-31
March 2006

IRAN'S OIL AND GAS WEALTH

INTRODUCTION

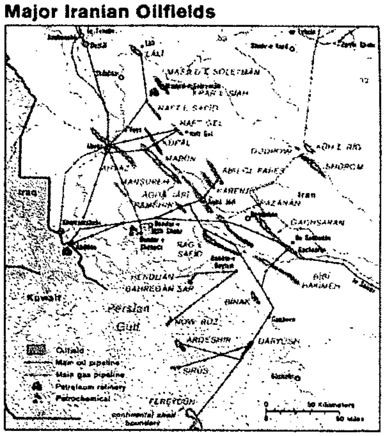
Iran's vast oil and gas resources undermine the Iranian regime's claim that its nuclear program is needed for domestic energy generation. Iran holds the world's third largest known oil reserves, 132.5 billion barrels, and second largest natural gas reserves, 971 trillion cubic feet, representing 10 and 16 percent, respectively, of the totals.[1] However, support for terrorism and economic mismanagement by the government have damaged oil and gas development in Iran. Specific impediments to development of these natural resources include:

- Membership in the OPEC cartel;
- Restrictive contracting practices;
- Threatening policies that provoke U.S. trade and investment sanctions; and
- State control of domestic energy prices.

IRAN'S OIL RESOURCES

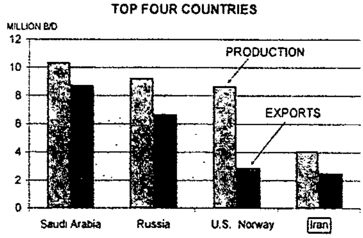
The map shows the largest of Iran's 40 producing oil fields (27 on- and 13 offshore), which, in terms of sulfur content and gravity, hold mostly mid-grade crude oil similar to that found in Saudi Arabia, Iraq, and Kuwait. Iranian crude generally sells for slightly less than the weighted average price of the OPEC "basket" of eleven crude oil grades.[2]

Major Iranian Oilfields



Only Saudi Arabia and Canada hold larger oil reserves than Iran, whereby most oil in Canada is in the form of oil sand and far more costly to extract. In oil production and exports Iran ranks fourth in the world; it produced 4.2 million barrels of oil per day (b/d) and exported 2.7 million b/d in 2005.

Figure 1 CRUDE OIL PRODUCTION, EXPORTS TOP FOUR COUNTRIES

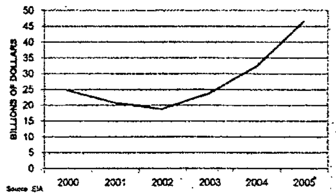


Source: EIA, 2004 Data.

[1] "Worldwide Look at Reserves and Production," *Oil & Gas Journal*, 103, 47 (12/19/2005): 24.
[2] Information supplied by the Energy Information Administration (EIA). African crude, for example, is lighter and hence more expensive. Since June 2005, the basket includes additional heavy crude oil grades, lowering the average price. EIA's "OPEC Revenues Fact Sheet" and "Country Analysis Briefs," are the sources for this report, unless otherwise noted.

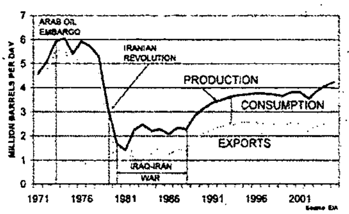
OPEC. Iran is a founding member of the Organization of the Petroleum Exporting Countries (OPEC) and participates in the cartel's restrictive output practices to drive up the price of oil on the world market. As the oil price has surged, Iran's net oil export revenue has reached record (nominal) levels, nearly doubling from $23.7 billion in 2003 to $46.6 billion in 2005.

Figure 2 IRAN'S NET OIL EXPORT REVENUE



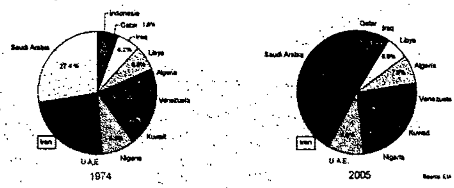
Eighty to ninety percent of Iran's export earnings come from oil. Boosted by oil, Iran's real GDP grew 4.8 percent in 2004 and 5.6 percent in 2005. But, Iran's rate of oil production and its share of OPEC's oil output are much lower than they were prior to the Iranian revolution and the subsequent war with Iraq. Oil production did increase after the war but is only now approaching the level of 35 years ago. Iran's share of OPEC production was 12.5 percent in 2005 compared to 19.8 percent in 1974.

Fig. 3 IRAN'S CRUDE OIL PRODUCTION & EXPORTS



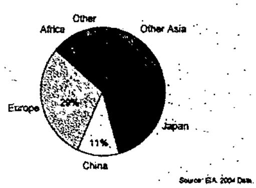
Lagging oil exports. Iran's oil consumption has been increasing substantially and claims 36 percent of production while its oil exports remain barely at half the peak rate of 1974. As Iran's oil production and exports declined, OPEC—whose output slightly exceeds its peak rate in the 1970's—reduced the output quota it assigns to Iran. Since 1990, OPEC has kept the quota at a rate between 3 and just over 4 million b/d. Iran thus accounts for a much smaller share of OPEC oil exports than it once did. Figure 3 compares the cartel members' relative shares of net oil export revenue in 1974 and in 2005. The EIA's estimate of 2005 OPEC revenue is $473 billion.

Figure 4 OPEC REVENUE SHARES



Fifty-six percent of Iran's oil exports are to Asia and 29 percent to Europe. Japan and the People's Republic of China (PRC) together buy over one-third of Iran's oil exports. The U.S. buys no oil from Iran (other than specially licensed swaps for Caspian oil).

Figure 5 IRAN'S OIL EXPORT DESTINATIONS



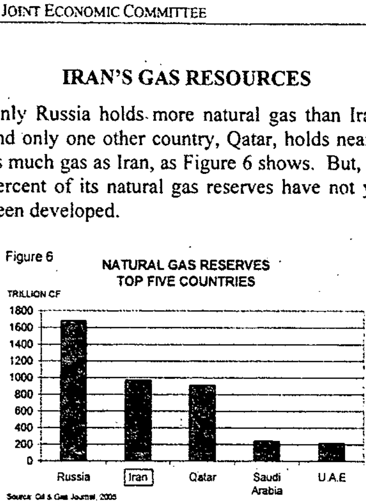
By comparison, 64 percent of all Mid-East oil exports are shipped to Asia, 16 percent to Europe, and 13 percent to the U.S.[3]

[3] Inter-area movements 2004, BP Statistical Review of World Energy, June 2005.

IRAN'S GAS RESOURCES

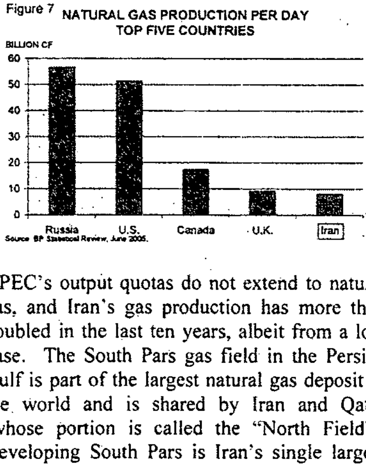
Only Russia holds more natural gas than Iran, and only one other country, Qatar, holds nearly as much gas as Iran, as Figure 6 shows. But, 62 percent of its natural gas reserves have not yet been developed.

Figure 6



Iran ranks only fifth in the world in natural gas production and produces far less gas than Russia, not only in absolute terms but also in proportion to its reserves.

Figure 7



OPEC's output quotas do not extend to natural gas, and Iran's gas production has more than doubled in the last ten years, albeit from a low base. The South Pars gas field in the Persian Gulf is part of the largest natural gas deposit in the world and is shared by Iran and Qatar (whose portion is called the "North Field"). Developing South Pars is Iran's single largest energy project, which already has attracted more than $15 billion in investments and has 18 active of 28 planned development phases.

Minimal gas exports. Natural gas now accounts for close to half of Iran's total energy consumption; its consumption of gas ranks fifth in the world. Iran imports natural gas from Turkmenistan via a pipeline built in 1997 and exports gas to Turkey, its only gas export customer. A natural gas pipeline to Turkey was completed in 2002, but there is a dispute between the two countries over price and purchase volume. Iran may be a net importer of gas.[4] It has signed multiple agreements with other potential gas customers, including Armenia, India, Pakistan, the PRC, and European countries, but concrete progress appears slow. In order to export natural gas on a large scale, Iran needs to build additional pipelines far beyond its borders and/or construct liquefied natural gas (LNG) facilities, of which it has none at this time. The potential for LNG exports has caused internal debate in Iran over the priorities of competing uses for natural gas.[5] Meanwhile, other Persian Gulf countries have moved ahead of Iran in positioning themselves for LNG exports.

CONFLICTING PRIORITIES

Buy-back contracts. Iran's restrictive petroleum law was loosened recently but remains a hindrance to foreign investment.[6] Along with Saudi Arabia, Iraq, and Kuwait, Iran is one of the Persian Gulf's "Big Four" oil nations enjoying the highest well flow rates and the lowest unit cost in the world, less than $2 per barrel.[7] However, investments in the billions of dollars are a prerequisite to

[4] The BP Statistical Review shows Iran's natural gas consumption exceeding production in 2004, 8.4 versus 8.2 billion cubic feet per day (bcfd).
[5] Gas can be used for domestic consumption, export, and re-injection into oil fields to raise underground pressure; see "Gas Use at Issue in Iran as Oil Production Sags," by Judy Clark, *OGJ*, 103, 18 (5/ 9/ 2005): 34.
[6] International Petroleum Encyclopedia 2005, PennWell Corp., p.149.
[7] Thomas R. Stauffer, "The Economic Cost of Oil and Gas Production: A Generalized Methodology," *The OPEC Review* 28, 2 (June 1999): 192.

production. Iran imposes so-called buy-back contracts on investors that compensate them through allocations of oil production on a relatively short-term, profit limiting basis. Oil field operations must be turned over to the National Iranian Oil Company (NIOC) when the contracts expire.

U.S. Sanctions. Since 1995, in response to Iran's support of terrorists and pursuit of nuclear technology, the U.S. has banned investment in and trade with Iran by executive order. In addition, the Iran-Libya Sanctions Act (ILSA) subjects foreign companies to sanctions, if they invest more than $20 million in Iran's energy sector. While a key waiver in the case of the South Pars gas field was granted, ILSA is believed to have limited Iran's oil production capabilities.[8] Also, most LNG plants use technology developed by U.S. companies, which could hinder Iran's progress in this field.

Large imports of gasoline. Domestically, Iran sets low prices for oil products and natural gas. A gallon of gasoline sells for less than 40¢. Low prices and an increase in population since 1980 from 40 to 68 million people have pushed Iran's gasoline consumption beyond its refining capacity. Motor gasoline consumption has increased by nearly 13 percent annually from 2000 to 2004, resulting in an estimated 170,000 b/d of gasoline imports last year. On a net basis, Iran's gasoline imports rank second in the world. Its import bill for gasoline is running at $3 to $4 billion per year. An estimated 25 percent of Iran's gasoline imports come from Persian Gulf countries, 15 percent from India, and the remainder from a variety of sources, including France, Turkey, Singapore, the Netherlands, and the PRC. Iran is a net exporter of refined products in total, based on shipments of residual fuel oil.

Diverse pursuits. Iran wants to raise its oil production to 5 million b/d by 2010; it has aspirations to expand the Caspian oil and gas trade and has made outsized claims for a stake in offshore fields. It wants to increase refining capacity from 1.47 to as much as 2.2 million b/d by 2008. It plans to convert 1.5 million motor vehicles to compressed natural gas (CNG) and install 700 CNG filling stations by the 2009 to 2011 timeframe.[9] It has announced new projects in exploration, pipelines, LNG, and petrochemicals. Well known are its nuclear ambitions. But, prospects in the Caspian Sea seem far off. Major producing oil fields are in decline—the rate of recovery in existing fields is 8 to 11 percentage points less than the world average—and there are doubts the country can even sustain its current production.[10] Iran is mired in slow-moving negotiations with an array of foreign companies, and it has drawn the ire of the world over its nuclear program.

CONCLUSION

Iran has an enormous energy output gap: the reserve-to-production ratio of, say, Russia for natural gas applied to Iran would yield 33 bcfd of gas production and for crude oil would yield 20 million b/d of Iranian oil production—4 and 4.8 times, respectively, its current rates of output. Iran is centrally located between European and Asian energy markets and is courted by eager buyers of oil and gas. Yet the regime insists on aggressive politics, pursues threatening nuclear technology, manipulates the international oil price through OPEC, and drives a wedge between energy demand and supply at home by limiting consumer prices while impeding foreign investment. Iran does not need nuclear energy; it needs to reconnect with the world, realign its disjointed priorities, and develop its vast oil and natural gas resources.

[8] See CRS Reports RS20871, "The Iran-Libya Sanctions Act (ILSA)," 4/19/2005, and RL32048, "Iran: U.S. Concerns and Policy Responses," 1/20/2006, by Kenneth Katzman. In 2001, the ILSA was extended to August 2006.

[9] Petroleum Encyclopedia, p. 149.

[10] Iran's crude oil output fell slightly in December 2005 and January 2006, as did OPEC's, according to Platt's *Oilgram News*, 84, 30 (2/14/2006).

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CHAD STONE
STAFF DIRECTOR

Opening Statement
Senator Jack Reed
Joint Economic Committee Hearing
July 25, 2006

Thank you, Chairman Saxton. I want to welcome both panels of experts and thank them all for testifying here today.

As we monitor the diplomatic developments surrounding the nuclear standoff with Iran—and as the current conflict between Israel and Hezbollah continues to destabilize the region—this hearing on energy and the Iranian economy is indeed timely.

Iran has recently enjoyed strong economic growth—primarily due to high oil prices. Despite some progress in reforming certain aspects of its economy, the Iranian economy continues to suffer from significant structural weaknesses. First, its heavy reliance on oil revenues makes it extremely vulnerable to oil price shocks. Second, entrenched political interests impede substantive economic reform. Lastly, the country continues to rank poorly on various indicators of foreign investment risk.

Such vulnerabilities lead some observers to conclude that the United States and its allies may have some leverage—primarily through sanctions, possibly backed up by the threat of military action—in convincing Iran to abandon any nuclear weapons ambitions.

However, oil prices are expected to remain high at least through 2007 and with a global oil market Iran will always find alternative customers in countries that are willing to violate sanctions to advance their own interests. Even if Iranian oil exports were to slow somewhat, the higher prices that resulted would, at least temporarily, cushion the revenue impact. And Iran's vast energy reserves promise that the country will remain attractive to foreign investors.

Russia and China recently signed on with the U.S. and its European partners in seeking a United Nations Security Council resolution ordering Iran to freeze its nuclear program, or face possible sanctions. To be truly effective on their own, sanctions must target the oil exports that are central to the Iranian economy. Given tight oil supplies, however, it is highly unlikely that all six negotiating partners would ultimately agree to such comprehensive economic sanctions. In fact, a decade's worth of experience with the Iran Libya Sanctions Act or "ILSA"—which was implemented during a period when oil was relatively cheap and plentiful—suggests our allies' reluctance to further rattle the global oil market. Further, both Russia and China have indicated they will not support military action against Iran.

The experience with U.S. sanctions against Iran suggests that a unilateral approach simply will not work. U.S. sanctions have not prevented Iran from developing what International Atomic Energy Agency (IAEA) inspectors believe to be a potential military dimension to its clandestine nuclear program, or from continuing to sponsor terrorist organizations such as Hezbollah and Hamas. Some analysts believe that U.S. sanctions have done more to isolate the United States than to isolate Iran.

Rather than taking a unilateral approach, the U.S. must continue to work with the U.N. community. If universal, comprehensive economic sanctions are not feasible, we must focus on a more effective mix of targeted sanctions that our negotiating partners can agree to. Targeted sanctions may not cripple the Iranian economy to the point where it is financially incapable of developing a nuclear weapon. However, coupled with concerted diplomatic efforts, the right mix of sanctions has the potential to convince Iran to abandon any nuclear weapons ambitions it may harbor.

I look forward to the testimony of our witnesses here today. In addition to hearing about the state of the Iranian economy and its energy sector, I hope to discuss ways in which sanctions could be effectively applied, preferably as part of a multilateral diplomatic effort involving the U.N. and the IAEA.

PREPARED STATEMENT OF HON. PAUL SIMONS, DEPUTY ASSISTANT SECRETARY FOR ECONOMIC AND BUSINESS AFFAIRS, DEPARTMENT OF STATE

Mr. Chairman, distinguished Committee members, I am pleased to be here today to testify on "Energy and the Iranian Economy."

Iran is an important country from a number of perspectives, and has a particularly significant place in the international oil and gas domain. But Iran is also a country whose policies and actions have long been cause for deep concern. Given its pursuit of weapons of mass destruction and missile delivery systems, its place as the leading state-sponsor of terrorism, its support for violent opposition to Middle East peace, its unhelpful role in Iraq, its oppression of its own citizens and abysmal human rights record, Iran poses, as Under Secretary Burns recently said, a profound threat to US interests.

Iran's concerted effort to develop a nuclear weapons capability has become the focus of particular concern, not only for the US but for the international community, as reflected in the resolution adopted in February by the International Atomic Energy Agency (IAEA) Board of Governors, and in the March statement by the United Nations Security Council (UNSC). On June 6, the governments of the US, UK, France, Russia, China, and Germany—referred to as the P5+1—offered Iran a set of far-reaching proposals that presented Iran with a clear choice between two paths: One path leads to important benefits for the Iranian people, if Iran suspends all enrichment-related and reprocessing activities and enters into negotiations on the basis of the P5+1 offer. The Secretary has made clear that the United States would be willing to join the negotiations if Iran fully and verifiably suspends its enrichment program.

If Iran chooses the other path and continues on its current course, it will face greater international isolation and strong U.N. Security Council action. Iran has failed to take the steps needed to allow negotiations to begin, specifically the suspension of all enrichment-related and reprocessing activities. Absent such a positive, concrete response from the Iranian government, we and our international partners have no other choice than to return to the U.N. Security Council to adopt a resolution which would make suspension mandatory.

THE IMPORTANCE OF ENERGY

Let me turn to energy matters. Iran is the world's second largest holder of natural gas reserves (after Russia), with an estimated 940 trillion cubic feet of gas available, and it ranks second or third (the Iranians claim 132 billion barrels) in conventional oil reserves. (While there is no doubt that Iran's oil and gas reserves are substantial, the opaque nature of the Iranian energy sector makes it difficult if not impossible to independently verify the figures it claims.) With a capacity of just over 4 million barrels per day (bpd), Iran is OPEC's second largest oil producer and second largest exporter (about 2.6 million bpd).

What is striking, however, is the fact that Iran is not as prominent a player on the international oil and gas scene as its geological potential would suggest. Despite its huge gas reserves, Iran is actually a gas importer (from Turkmenistan). At present, it exports gas only to Turkey and to the small Azerbaijani exclave of Nakhichevan, with imports and exports roughly balancing. A project for a gas pipeline to Pakistan and India has long been a subject of study and discussion, but thus far of little concrete action. Notwithstanding its central location, Iran has not developed into a hub for international oil or gas pipeline development.

LNG has also been a focus of discussion and negotiation, but at present, no LNG facilities exist and none are under construction. This contrasts with the situation in Qatar, Iran's small neighbor on the other side of the Gulf, whose North Field shares a reservoir with Iran's South Pars field. Qatar's liberal investment regime, secure political climate, and strong relationship with the US have attracted massive foreign investment and enabled Qatar to leap far ahead of Iran in developing LNG and other gas projects. At just above 4 million bpd, current oil output in Iran is significantly less than the approximately 6 million bpd Iran produced prior to the 1979 revolution; production has increased in recent years, but not by a great deal (it was about 3.8 million bpd in the mid-90s). New production has been largely offset by the natural decline (estimated at 8 to 13 percent per year) in the output of older fields, while rising consumption squeezes exports.

ENERGY POLICY

Iran has expressed its intention to expand its production of both oil and gas. Plans have been announced to increase oil production to 5 million bpd in 2010 and 8 million bpd in 2015. But Iran's efforts to attract foreign investment through "buy-back" deals, initiated in 1995 in a reversal of post-Revolution policy, have met with only limited success. Foreign investment in this sector appears to be slowing, due in part to a strong perception of heightened political and financial risk in dealing with Iran. In addition to the discouraging impact of Iran's problematic policies, including its pursuit of nuclear weapons which has raised the possibility of international sanctions, international companies have found it increasingly difficult to reach agreement with Iranian negotiators on project terms that are economically attractive. US measures and policies, including ILSA (the Iran and Libya Sanctions Act), have also contributed to the negative business and investment climate that prevails today for Iran. Foreign involvement in the oil and gas sector also remains a politically charged issue in Iran. Most current oil production in Iran comes from fields developed and operated by Iranian entities;

Iranian refining capacity is inadequate to meet the demand for most petroleum products, particularly gasoline, and the Energy Information Administration (EIA) estimates that Iran will spend more than $4 billion on product imports this year. Prices are fixed well below international market levels (gasoline costs about 9 cents per liter), which inevitably spurs demand and makes smuggling to other countries profitable. Price increases have proven politically unacceptable, and proposals for rationing are meeting opposition.

THE IRANIAN ECONOMY

There are some positive indicators in the Iranian economy: recent IMF estimates for fiscal year 2005 put GDP growth at 6 percent. Iran's foreign exchange reserves are estimated at $47 billion, excluding gold—about 10 months worth of imports at the 2005 level. The IMF also estimates a budget surplus for 2005/2006.

But despite the advantage of recent high oil prices, there are also very significant negatives in the economic picture, including high rates of inflation and unemployment. For 2005, official inflation and unemployment rates were both in the double digits at 13 percent and 11 percent respectively. Iran's stock market dropped sharply in 2005/06, losing 20 percent of its value (though the stock market is not a major factor in Iran's overall economy). The Iranian economy also remains heavily dependent on the output of a single sector, with petroleum export revenues, estimated at nearly $45 billion last year accounting for 80 to 90 percent of Iran's foreign exchange earnings and more than 10 percent of GDP. According to the EIA's January 2006 report, Iran's major customers for oil are Japan, China, South Korea, Taiwan, and Europe.

NUCLEAR PROGRAM

Iran's formerly secret efforts to develop a complete nuclear fuel cycle included uranium mining and milling, uranium conversion, gas centrifuge enrichment, laser enrichment, construction of a heavy water production plant, a heavy water reactor, and plutonium separation experiments. Iran claims it is seeking an indigenous nuclear fuel cycle, including the capability to make fissile material, for nuclear energy purposes only. Iran has also claimed that its nuclear activities will provide energy security and independence. However, Iran's limited uranium reserves would not give Iran nuclear energy independence and the costs to Iran of manufacturing fuel indigenously would far exceed the price at which fuel could be purchased on the international market. As noted, Iran also has huge reserves of natural gas, which if developed would represent a significant energy resource. If recovered, flared natural gas in Iran would be sufficient to generate over 4000 megawatts of electricity, equal to four Bushehr-capacity power plants.

Bushehr is the only power reactor under construction in Iran. Bushehr, a VVER (from the Russian acronym for water-cooled, water-moderated) 1000, 1000 megawatt light water reactor, is nearing completion. Iran still lacks the know-how and facilities to manufacture the requisite reactor fuel for Bushehr. Russia has agreed to supply fuel for this reactor, and to take back the spent fuel, but has not delivered fuel.

The August 2005 offer from the EU–3 (the UK, France, Germany)—which Iran rejected—included future European assistance to support an expanded, safe, safeguarded nuclear power program. The June 6, 2006 package of incentives offered by the P5+1 governments includes an offer to cooperate with Iran in the development of a civilian nuclear power program.

The P5+1 package reaffirms Iran's right to nuclear energy for peaceful purposes in conformity with Iran's obligations under the Nuclear Nonproliferation Treaty. The President and the Secretary have made clear that we do not seek to deny peaceful nuclear energy. However, Iran's long history of deception and noncompliance with its NPT (nonproliferation treaty) and IAEA safeguards obligations have created a loss of confidence in Iran's intentions.

As the President has said, civilian nuclear energy "is a legitimate desire. We believe the Iranian people should enjoy the benefits of a truly peaceful program to use nuclear reactors to generate electric power. So America supports the Iranian people's rights to develop nuclear energy peacefully, with proper international safeguards."

LOST OPPORTUNITIES

With its enormous natural resource endowments and talented people, Iran should be among the most prosperous countries in the world. But counterproductive economic policies, mismanagement, widespread corruption, and misguided goals such as the dangerous quest for nuclear weaponry, have dimmed Iran's economic prospects. Iran's economic problems reflect in some ways its negative political culture, with all the problematic manifestations I outlined earlier. As President Bush recently noted, Americans admire the rich history and vibrant culture of Iran, and its many contributions to civilization. "The people of Iran", the President has said, "like people everywhere, also want and deserve an opportunity to determine their own future, an economy that rewards their intelligence and talents, and a society that allows them to pursue their dreams." Thus far, those dreams have been sadly thwarted.

PREPARED STATEMENT OF DR. KENNETH KATZMAN, SPECIALIST IN MIDDLE EASTERN AFFAIRS, CONGRESSIONAL RESEARCH SERVICE, LIBRARY OF CONGRESS

Thank you, Mr. Chairman, for inviting me to appear at today's hearing. I request that the full statement be placed in the record, and I will summarize my remarks.

OVERVIEW OF IRAN'S POLITICAL ECONOMY

As a longtime analyst of the politics of Iran, I will primarily focus on the politics of Iran's economy. I want to preface my remarks by saying how difficult it is to obtain authoritative information on Iran's political economy. Iran is not an isolated country—it has relatively open trade with U.S. allies. However, Iran's economy is not transparent and there is no U.S. Embassy in Iran to follow Iran's economy and obtain authoritative information. The Iranian government has not, to date, allowed a CRS visit to Iran on the grounds that CRS is part of the U.S. Government.

In particular, I will discuss how key leaders and factions have gained a substantial measure of control over major segments of the Iranian economy, avoiding virtually any official transparency or accountability. Iran's leaders are able to steer the proceeds of parts of the economy to provide patronage and build their constituencies, particularly among the lower classes. Because Iran's political leaders benefit from the structure of the economy as it is, there is little chance under the current system of major, structural economic reform.

The consensus of experts is that Iran's economy has improved substantially over the past 2 years, but that is primarily the result of increased oil prices and masks underlying weaknesses that would likely be revealed were oil prices to fall significantly. Oil revenues account for about 80–90 percent of Iran's export earnings and almost 50 percent of the government budget. The IMF, the World Bank, and outside experts say that Iran has pursued only limited structural economic reform and that Iran needs to reform its financial sector and privatize state-owned industries, and further liberalize trade regulations. As is also true of other countries in the region and throughout the developing world, some reforms are blocked by powerful political interests, and others are not implemented because of fear of mass unrest. In the case of Iran, some of its economic difficulties have been caused by the ideology of the Islamic revolution of 1979, which propounded self-sufficiency and an end to Iran's dependence on and perceived manipulation by great powers.

Energy Subsidies. As one example of Iranian mismanagement of its energy sector, Iran heavily subsidizes gasoline costs to consumers. Gasoline costs only about 40 cents per gallon in Iran, and the Majles (290-seat elected parliament) has consistently rejected proposed legislation to reduce the gasoline subsidy because doing so would result in higher prices, which could spark unrest. Iran's refining capacity is sufficient to fulfill only about 60 percent of the gasoline consumption of Iranian consumers, and the remainder is purchased from nearby sources (including India and Kuwait) on the open market. As a result, Iran's government is currently spending an estimated $5 billion per year to import refined gasoline, and the funds have been derived by drawing down on Iran's foreign exchange reserve fund. It is a large increase over the amounts spent in previous years—about $1.5 billion per year. Most experts believe that Iran should eliminate the gasoline subsidy in order to reduce domestic demand, in part by encouraging use of public transportation. In addition, according to press accounts, Iran's per-vehicle gasoline consumption is relatively high because many of its vehicles are older-model and not fuel efficient.

Inefficient Social Welfare Policies. A 2003 World Bank assessment notes that the Islamic regime has pursued a "social justice" policy since it took power in 1979.[1] The official welfare effort has succeeded in reducing the proportion of the population below the poverty line from 47 percent in 1978 to 19 percent in 2003. The regime has also closed a gender gap in education (even though the regime is perceived as repressive of women), and it has instituted universal education and extensive health care coverage.

Over 7 million Iranians (about 10 percent of the population) benefit from the government's officially sanctioned social welfare network. The main official relief agencies are the Welfare Organization and the Imam Khomeini Relief Committee. They are overseen by the Ministry of Welfare and Social Security. The Imam Khomeini Relief Committee is said to assist as many as 7 million Iranians with basic foods. The Welfare Organization, as well as the Committee, provides social welfare services to women-headed households as well as other recipients. The Ministry of Welfare and Social Security has set up some 7,000 job centers for women heads of households, providing vocational training among other services. Other ministries that oversee or give out social welfare benefits are: the Ministry of Housing and Urban Development; the Ministry of Agricultural Jihad; and the Ministry of Labor and Social Affairs.

However, the government's social welfare strategy includes the provision of implicit subsidies, not only for gasoline but also for medicines, bread, and other goods. The World Bank calls these subsidies "untargeted and ineffective" and not disproportionately benefiting the poor. Much of the benefit of subsidies goes to Iranians who are middle class or even affluent. For example, the Imam Khomeini Relief Committee also provides marriage dowries, as well as education assistance to about 600,000 students, including university scholarships. These benefits do not necessarily go to Iranians who are below the poverty line. In addition, according to critics, the government is trying to eliminate poverty through handouts and charitable transfers rather than by generating employment. The Bank recommends that Iran should shift away from untargeted subsidies to more targeted subsidies that benefit the genuinely poor.

Quasi-State Foundations (*Bonyads*). Part of this inefficiency might be a result of the politics of Iran's social welfare system. As discussed below, many Iranians receive benefits not only from the "official" social welfare network but also from an informal charitable network. The core of the informal network is the quasi-official "foundations" (*bonyads*) described below. These organizations are controlled by key clerics and other former or current government officials. The *bonyads* are technically not under the authority of the Ministry of Welfare and Social Security, and therefore the *bonyads'* criteria for deciding who should receive social welfare is often arbitrary, according to many observers, explaining why some Iranians who are not truly needy receive benefits. Those needy Iranians who are not well-connected or who are perceived as unsympathetic to the regime might often not receive social welfare benefits. By contrast, the official social welfare system overseen by the Ministry of Welfare and Social Security do have clear criteria and clearly stipulated benefits, for example for unemployment compensation, old age pensions, disability pensions, survivor benefits, and medical benefits.

The *bonyads*, which are said to account for an estimated 33–40 percent of Iran's total GDP, also distort normal market forces in Iran. Some of them have existed for centuries as custodians of Shiite holy sites in Iran, and, since the 1979 revolution, have come to enjoy significant economic and political privileges. Several of the *bonyads*, the heads of which are appointed by Supreme Leader Khamene'i, control vast assets given to them by the state. Combined, they are said to employ as many as 5 million Iranians and give social welfare to perhaps several million more. These figures indicate that the *bonyads* have a large constituency and are able to build support for the regime among the working and lower classes.

Their privileges are vast, by all accounts. According to the World Bank study in 2001, the *bonyads* enjoy virtual tax exemption and customs privileges, preferential access to credit and foreign exchange, and regulatory protection from private sector competition. Using these preferences, some of the major *bonyads* have been able to carve out virtual monopolies in the import and distribution of several categories of items. Several of the *bonyads* are headed by former or current major figures of the regime, largely explaining their exemption from substantial official oversight.

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[1] World Bank Report No. 25848–IRN. Iran: Medium Term Framework for Transition. April 30, 2003.

The most controversial allegation about the *bonyads* has been whether or not their funds have been used to procure weapons of mass destruction (WMD) technology. This allegation has long surrounded the largest *bonyad,* the Foundation for the Oppressed and Disabled (discussed further below), primarily because this bonyad has been run by hardliners and former officials of the Revolutionary Guard (example, Mohsen Rafiq-Dust, a former Minister of the Revolutionary Guard). The theory underlying the allegation is that the *bonyads,* because they are not formally part of Iran's government, can operate outside official scrutiny of foreign governments, and could therefore illicitly procure equipment that might not be approved for export to Iran. During an official visit to Dubai in 1995, observers at the US consulate there told me that Foundation employees were present in significant numbers in Dubai, holding large quantities of cash which they were using to procure technology from Russian and other arms and technology brokers in the emirate. Others, however, put forward a less alarmist view of the Foundation's activities, saying that Foundation officials carry cash for the purpose of obtaining better pricing on purely civilian goods such as household appliances and paper goods.

Some sources say there might be as many as 123 different *bonyads* in Iran, but most experts focus only on the largest and best known of them. The major *bonyads* are the following:

- The Foundation for the Oppressed and Disabled (*Bonyad Mostazafin va Janbazan*). The largest and most important of the *bonyads,* it took over much of the assets of the former Shah and his associates who fled Iran after the Islamic revolution. It is headed by Mohammad Forouzandeh, the chief of staff of the Revolutionary Guard in the late 1980s and later Defense Minister. It now manages over 400 companies and factories, with a total value estimated by Iranian experts at as much as $12 billion, and it is considered the largest economic entity after the government.[2] The Foundation is active in the following sectors: food and beverages, chemicals, shipping (Bonyad Shipping Co.), metals, petrochemicals, construction materials, dams, towers, farming, horticulture, animal husbandry, tourism, transportation, hotels (including two major hotels in Tehran), commercial services, and financing. It produces the best selling soft drink in Iran, called Zam Zam. The Foundation uses the profits from these ventures to assist 120,000 families of veterans and victims of the 1980–88 Iran-Iraq war, as well as large segments of the poor.
- Martyr's Foundation (*Bonyad Shahid*). This foundation also assists families of those killed or maimed in the Iran-Iraq war. It owns several companies involved in mining, agriculture, construction, and import-export.
- The Shrine of Imam Reza Foundation. Based in Mashhad in northeastern Iran, it used donations from 8 million pilgrims to the Shrine of Imam Reza to buy up 90 percent of the arable land in its area. The estimated value of this land could be as high as $20 billion. The largest employer in Khorasan Province (Mashhad is its capital), the Foundation runs 56 companies, including a Coca-Cola factory and two universities, and it is said to have diversified also into automobile manufacturing. It is headed by Ayatollah Abbas Vaez-Tabasi, who is on the powerful Expediency Council that is headed by former President Akbar Hashemi-Rafsanjani. Vaez-Tabasi's son is married to a daughter of Supreme Leader Khamene'i.
- The Noor Foundation. It reportedly imports sugar, pharmaceuticals, and construction equipment, and has substantial real estate holdings. It is headed by Mohsen RafiqDust, the first Minister of the Revolutionary Guard and who later was head of the Foundation of the Oppressed. RafiqDust is on the Expediency Council.
- 15 Khordad Foundation. In 1989, it offered $1 million to anyone who killed Salman Rushdie, author of the Satanic Verses that Ayatollah Khomeini called blasphemous. The Foundation is named for the date in 1963 when Khomeini began revolutionary activities against the then Shah.
- Housing Foundation (*Bonyad Maskan*). This foundation was set up in the months after the February 1979 Islamic revolution to provide housing for the poor, particularly in rural areas.
- Ahl al-Bayt Foundation. Said by observers to be run by younger-generation clerics.
- Isargaran Foundation. Said to be controlled by ex-Revolutionary Guard officers, it provides services to the families of those killed or taken prisoner in the Iran-Iraq war.

The Cooperatives. The so-called "cooperatives" are another sector of the economy that have come under the control of key elites. There is a Ministry of Cooperatives that, in theory, oversees the operations of cooperatives. However, in practice, the larger cooperatives are run by allies or relatives of regime heavyweights and therefore the Ministry's oversight powers are limited.

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[2] The IMF estimated its value at $3.5 bilion in 2000.

The most well known cooperative, and which exemplifies the privileged status of these organizations, is the Rafsanjan Pistachio Growers Cooperative. It is run by the cousin of former president Akbar Hashemi-Rafsanjani, who is chairman of the powerful Expediency Council. The cooperative claims to represent over 70,000 pistachio farmers. The pistachio export industry in Iran is valued at an estimated $746 million. Rafsanjani's older brother, Ahmad, headed the Sarcheshmeh copper mine complex, although he is now retired. The control over these sectors has given Rafsanjani substantial opportunities for patronage, although obviously his wealth did not prevent his loss in the 2005 Presidential election. Some believe it was partly his wealth that caused his defeat because he is viewed as corrupt and less in tune with the interests of the lower classes than is Ahmadinejad.

The Revolutionary Guard. Some have noted that the Revolutionary Guard—the part of the armed forces that is most loyal to the clerical leadership—is playing an increasing role in the economy. President Ahmadinejad was a commander in the Guard during the 1980–88 Iran-Iraq war and his presidency is likely to only enhance the Guard's influence. Its motivations for expanding its economic role are apparently to provide rewards for senior officers, and to generate revenue to supplement the budget allocated to the Guard by the government.

The Guard has formed contracting firms to bid on government projects, using its strong political influence to win business. In one recent example, one of the firms owned by the Guard, called "Ghorb," is being awarded a $2.3 billion deal to develop two phases of Iran's large South Pars gas field. Most of the other phases have been awarded to well-known multi-national energy firms, and the work given to Ghorb had originally been awarded to Norway's Aker Kvaerner, but was retendered.[3] This suggests that the Guard exerted political influence to win the contract and take it away from what most industry experts would consider a more capable firm. Two years ago, the Guard briefly closed down the new international airport in Tehran to oust an Austrian-Turkish firm from some airport operations; those operations have now been taken over by the Guard.

THE POLITICS OF ECONOMIC REFORM

Many Iranian officials acknowledge the weaknesses of Iran's economy, and argue for reform. However, differences among Iranian leaders—in part caused by their different constituencies—undoubtedly has contributed to the relative deadlock on broad structural reform of the economy.

Some of the differences were exposed in the course of the 2005 Presidential election campaign, which resulted in the second round victory (June 24) of hardline Tehran mayor Mahmoud Ahmadinejad. He became the first non-cleric president since 1981. Ahmadinejad campaigned on a platform of redistribution of wealth to the poorer classes, rather than a growth-oriented strategy. He and his allies tend to favor an extensive state role in the economy, including state management of factories and other entities that can provide employment for the working classes. Since taking office, he has tried to implement those promises by proposing a "marriage fund" to provide monies to newly married couples, as well as increasing some pension and other social welfare payments run by the state. He also has authorized below-market rate lending and debt cancellation for farmers.[4]

As a former Revolutionary Guard officer himself, he is close to other former Guards and those who run the various *bonyads*, particularly the Foundation of the Oppressed and Disabled, and he supports their work in distributing social welfare to the poor. He does not favor eliminating the preferences that the *bonyads* enjoy because he depends on the *bonyads* to provide social payments to his core lower class base.

He is also less attracted than are other Iranian politicians to greater economic interaction with Europe and other Western countries, for example by joining the World Trade Organization[5] or reaching a free trade agreement with the EU (currently being negotiated). Ahmadinejad believes that his lower class constituents would not necessarily benefit from a more export-oriented, growth- oriented economy, and the lower classes generally do not buy European-made luxury goods that constitute a growing portion of Iran's imports.

Ahmadinejad's main competitor in the 2005 election, Rafsanjani, represented another pole in the debate over economic reform. Rafsanjani is a Khomeini disciple who has been a leading figure since the revolutionary regime was formed. As one

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[3] Kalantari, Hashem and Sally Jones. Iran Set to Award Lucrative Gas Deal to Elite Militia. *Wall Street Journal*, June 29, 2006.

[4] Diehl, Jackson. Deft Demagoguery in Iran. *Washington Post*, May 7, 2006.

[5] Iran applied to join the WTO in May 2005 when the Bush Administration dropped its nine-year-long objection to Iran's application

of Iran's richest men, Rafsanjani believes Iran would benefit from a free trade agreement with the EU that would open up big markets to increased volumes of Iranian exports.

Another large economic interest that carries substantial weight in Iran are the bazaar merchants ("the bazaaris"). The bazaaris control not only an important engine of Iran's economy—the import and export of goods, but several newspapers, including the well-known Resalat, are considered their mouthpiece. They also have the ear of Supreme Leader Ali Khamene'i, who has been supportive of the bazaaris throughout his career. The bazaaris and their allies tend to oppose a large role for the state in the economy. Like Iranian reformers, the bazaaris want increased trade with the West, because doing so would expand the market for Iranian goods. However, the bazaaris do not necessarily want a completely open trading regimen that might impinge on their privileged trading status. The bazaaris are also skeptical of increased foreign investment, because Western factories and companies might operate more efficiently than Iranian companies and compete effectively with the bazaaris. Some Iranians complain that the bazaaris try to control certain markets by acting in concert, such as jointly boycotting supplier companies to force them to make concessions.[6] Some experts refer to practices like this as "crony capitalism."

THE ENERGY SECTOR

Iran's energy sector is undoubtedly the most closely watched portion of the Iranian economy, because of the dependence of the economy on its revenues. Since the Islamic revolution, Iran's energy sector has been deteriorating primarily because of antiquated practices and equipment. Oil production fell from 6 million barrels per day (mbd) in 1974, when the Shah was in power, to about 3.9 mbd since the 1979 revolution. Of that amount, Iran exports about 2.4 mbd. Iran's proven oil reserves are about 128 billion barrels, about 10 percent of the world's total. Its natural gas reserves are even more noteworthy—about 940 trillion cubic feet, second only to those of Russia. In the mid 1990s, Iranian leaders acknowledged that halting the deterioration of the oil sector and developing the unexploited gas sector would require foreign investment by the world's major energy corporations.

To develop the energy sector, Iran has been able to work around its ideology to attract substantial foreign investment. In 1996, Iran first offered various onshore and offshore oil and gas fields to foreign investment under a "buy-back" arrangement, in which the investing firm(s) incur all development expenses and are paid back, plus given a fixed rate-of-return, from the proceeds of the field once it becomes productive. This arrangement enabled Iranian leaders to claim that they had not compromised Iran's sovereignty in allowing the foreign investment.

Iran's buy-back offer has attracted significant foreign investment, despite Congress' enactment in 1996 of the "Iran-Libya Sanctions Act" (P.L. 104–172). That law, extended for another 5 years in 2001, imposes sanctions on foreign companies that invest in Iran's energy sector. However, the Clinton and Bush Administrations have not imposed any actual sanctions on investing firms, perhaps causing foreign firms to minimize the importance of this U.S. law in considering whether or not to invest in Iran.

Since 1997, when the first foreign investments began under the buy-back plan, foreign companies have committed to at least $15 billion in foreign investment to develop about a dozen Iranian oil and gas fields. The earliest of the investments have begun production, and the more recent investments are under development and expected to begin producing oil and gas soon. Iran says that it expects these investments to increase its oil production to about 5 mbd by 2009, and 7 mbd by 2024.

Most of the natural gas produced by the new investments has been used for the domestic market or for re-injection to Iran's oil fields to boost production of oil, although it is exporting gas to Turkey through a joint pipeline. Iran is hoping to become a major gas exporter and, over the past year, Iran has signed a number of long-term (25 year) agreements with gas buyers, particularly in China and India. Iran is also in discussions with India and Pakistan for the construction of a natural gas pipeline that would link the three. The Bush Administration has publicly "expressed concern" about the pipeline, a stance consistent with U.S. policy of opposing energy routes that include Iran.

CONCLUSION

The current confluence of political interests and factions in Iran will likely prevent any substantive economic reform. The connections between the various

[6] Birch, Nicholas. In Iran, It Pays To Be a Religious Leader. Seattle Times, August 20, 2003.

bonyads, the Revolutionary Guard, and the upper reaches of the regime are too strong to permit curbing their influence in the economy. At the same time, the economic strength of the *bonyads* and the cooperatives translate into political strength for the clerics and politicians that run them. The income generated by these quasi-state economic conglomerates give the clerics substantial opportunity for patronage and keeps the Iranian public dependent on them for social welfare. On the other hand, these economic mechanisms are keeping Iran's poor fairly well sustained and, in the view of some, represent useful and necessary institutions even if they reduce the transparency of Iran's economy.

PREPARED STATEMENT OF ILAN BERMAN, VICE PRESIDENT FOR POLICY, AMERICAN FOREIGN POLICY COUNCIL

Chairman Saxton, Vice-Chairman Bennett, distinguished members of the Committee:

It is a privilege to appear before you today to discuss the subject of the Iranian economy and U.S. policy options.

There is no greater foreign policy challenge facing the United States today than the one posed by the Islamic Republic of Iran. The Iranian regime's persistent work on its nuclear program, and its intransigence in the face of international demands, has catalyzed a growing crisis that threatens international peace and security. So far, however, there has been little public discussion about the economic dimension of the current crisis, or of the financial levers available to the United States and its international partners to alter Iranian behavior.

WHAT FUELS IRANIAN INTRANSIGENCE?

More than any other factor, Iran's defiance in the current stand-off with the West over its nuclear program has been made possible by energy.

Over the past several years, the Islamic Republic has emerged as a bona fide energy superpower. Home to approximately 10 percent of world oil, Iran is the second largest exporter in the Organization of Petroleum Exporting Countries (OPEC), producing an average of 3.9 million barrels of oil per day. At the same time, Iran sits atop the world's second-largest reserves of natural gas (some 940 trillion cubic feet). As a result, Iran's economy is overwhelmingly energy-based. Today, the vast majority (80 to 90 percent) of Iran's export earnings, as well as about one half of its budget and a quarter of its gross domestic product, is derived from energy exports to the international community.[1]

In the past, this energy-dominated economy has led to wild fluctuations in Iran's financial fortunes. During the late 1990s, plummeting world oil prices left the Iranian regime nearly bankrupt.[2] Today, however, quite the opposite is true; the rising price of world oil generated by political instability associated with the War on Terror has provided Iran with a staggering fiscal windfall. As of March 2006 (the end of Iranian calendar year 1384), officials in Tehran were publicly estimating their country's hard currency reserves at some $50 billion.[3] These added resources and financial cushion can be expected to dramatically increase the Iranian regime's willingness to engage in risky regional behavior, as well as to accelerate the pace and scope of its strategic programs, in the months and years to come.

Iranian officials have attempted to solidify this economic status through a major expansion of their country's international energy profile. Over the past 2 years, Iran has signed two massive exploration and development accords, worth an estimated $100 billion over the next twenty-five years, with China alone.[4] A growing number of other nations, including France, Malaysia, japan, Canada, and Italy, are now engaged in the development of existing oil fields within the country, and this involvement is expected to increase as recent discoveries—including the Azadegan field and Bangestan reservoirs in southern Iran; as well as the offshore Dasht-e-Abadan site near the southwestern port city of Abadan—begin to come online.

Iran has also commenced efforts to become a major global exporter of natural gas. Since 2002, it has supplied Turkey with substantial natural gas deliveries via a bi-

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[1] Energy Information Administration, United States Department of Energy, "Country Analysis Brief: Iran," April 2004, http://www.eia.doe.gov/emeu/cabs/iran.html.

[2] See, for example, Michael Rubin, "What Are Iran's Domestic Priorities?" Middle East Review of International Affairs 6, no. 2 (2002), 26–27.

[3] *Aftab-e Yazd* (Tehran), May 10, 2006, as translated in Mideastwire Daily Briefing, May 12, 2006, http://www.mideastwire.com.

[4] Robin Wright, "Iran's New Alliance with China Could Cost U.S. Leverage," Washington Post, November 17, 2004, A21.

lateral pipeline link and, according to official Turkish government statistics, could provide roughly 20 percent of total Turkish natural gas consumption by the end of the decade.[5] A similar arrangement is emerging between Iran and Armenia as part of a pipeline, currently under construction, that could supply Armenia with up to 47 billion cubic meters over a period of 20 to 25 years, beginning in 2007.[6] Iran has opened similar discussions with Georgia, and has even taken steps to coordinate natural gas policy with Moscow as part of a Russia-led natural gas cartel now emerging in the post-Soviet space.[7]

At the same time, the Iranian regime has dramatically increased its ability to leverage its strategic location in the Strait of Hormuz, the principal passageway for roughly two-fifths of world oil trade. According to U.S. intelligence estimates, a sustained national military rearmament over the past several years has provided Iran with the ability to temporarily shut off the flow of oil from the Persian Gulf, even with a Western military presence in the region.[8]

It is a testament to this energy clout that, as the international crisis over Iran's runaway nuclear ambitions has deepened, Iranian officials have repeatedly raised the specter of a disruption of energy trade in the Persian Gulf. Regime officials such as Mohammed-Nabi Rudaki, deputy chairman of the Iranian parliament's national security committee, have warned that the Islamic Republic has the power to "to halt oil supply to the last drop from the shores of the Persian Gulf via the Straits of Hormuz" should serious measures be undertaken against the Islamic Republic at the United Nations.[9] Similarly, Iranian president Mahmoud Ahmadinejad has warned the United States and Europe that the global price of crude has not yet reached its "real value."[10] Even Iran's Supreme Leader, the Ayatollah Ali Khamenei, has threatened the West with disruptions in fuel shipments from the Persian Gulf in the event of a "wrong move" against Iran.[11] And regime officials have concretely demonstrated their capacity to do so, holding a week-long series of aerial, naval and ground maneuvers in the Persian Gulf in April 2006 to showcase the force-projection capabilities of their elite clerical army, the Pasdaran.

ASSESSING IRANIAN VULNERABILITIES

Given such posturing, it is not surprising that some analysts have concluded that energy is Iran's "trump card" in its dealings with the West.[12] This economic leverage, however, is a two-way street—and on at least three fronts, Islamic Republic is susceptible to economic pressure from the international community.

Commodity shortages

Despite massive oil exports of some 2.5 million barrels a day, Iran currently imports more than a third of its annual consumption of over 64.5 million liters of gasoline from a variety of foreign sources (among them India, France, Turkey and China) at an estimated cost of more than $3 billion annually.[13] These imports are not surplus; Iran reportedly maintains just 45 days worth of gasoline domestically, and requires steady supplies of refined petroleum products from abroad for the continued functioning of its economy.[14] Mounting international pressure, moreover, is already raising the costs of these deliveries. One leading Iranian policymaker has predicted that the regime will need to spend an extra $5 billion this year alone to

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[5] "Turkish Energy Policy," Turkish Ministry of Foreign Affairs, n.d., http://www.mfa.gov.tr/grupa/an/policy.htm.

[6] "Iran, Armenia Sign Agreement on Gas Export," Asia Pulse, May 18, 2004.

[7] "Russia Favors Iran Route for Crude Exports," Tehran Times, June 14, 2004.

[8] Defense Intelligence Agency Director Lowell E. Jacoby, "Current and Projected National Security Threats to the United States," statement before the U.S. Senate Select Committee on Intelligence, February 16, 2005, http://intelligence.senate.gov/0502hrg/050216/jacoby.pdf.

[9] Yossi Melman, "Iranian official: U.N. Sanctions May Lead Us to Seal Off Persian Gulf," Ha 'aretz (Tel Aviv), January 24, 2006, *http://www.haaretz.com/hasen/spages/674159.html.*

[10] "Iran: Oil Undervalued," United Press International, April 20, 2006.

[11] "Tehran Warns of Fuel Disruptions," BBC (London), June 4, 2006, http://news.bbc.co.uk/2/hi/middle east/5045604.stm.

[12] See, for example, Clifford Kupchan, "Tehran's Trump Card," Los Angeles Times, April 23, 2006, *http://www.latimes.com/news/printedition/suncommentary/la-opkupchan23apr23,1,4489060.story?coll=la-headlines-suncomment.*

[13] Energy Information Administration, U.S. Department of Energy, "Country Analysis Brief: Iran," January 2006, *http://www.eia.doe.gov/emeu/cabs/Iran/Background.html;* "Iran's Refining Capacity to Increase to 900,000,'" *iranmania.com,* February 19, 2006, *http://www.iranmania.com/News/ArticleView/Default.asp?ArchiveNews=Yes&NewsCode=40656&NewsKind=CurrentAffairs.*

[14] Study by Iran's Institute for International Energy Studies, as cited in Ali Nourizadeh, "Exploring Iran's Military Options," Al-Sharq al-Awsat (London), January 23, 2006, *http://aawsat.com/english/news.asp?section=3&id=3528.*

maintain its established policy of deep subsidies on the sales of gasoline and avoid domestic rationing.[15] This suggests that the imposition of an embargo on foreign gasoline supplies to Iran could achieve rapid results—ranging from the depletion of hard currency reserves to a work stoppage in many of Iran's industrial sectors.

Centralized economic hierarchy

Today, the vast majority of regime wealth is concentrated in the hands of a very small number of people, whose associates and relatives dominate the Iranian economy. The extended family of former Iranian president (and current Expediency Council chairman) Ali Akbar Hashemi Rafsanjani, for example, now virtually controls copper mining in Iran, the regime's lucrative pistachio trade, and a number of profitable industrial and export-import businesses.[16] A related economic power center is Iran's *bonyads,* the sprawling, largely unregulated religious/social foundations overseen by Iran's Supreme Leader, which account for between 10 and 20 percent of Iranian national GDP.[17] Given this economic hierarchy, targeted financial measures that restrict the ability of these individuals and organizations to access international markets—and curtail their capacity to engage in commerce—are likely to have an immediate and pronounced effect on regime decisionmaking.

Foreign direct investment

The dozens of billions of surplus dollars collected by the Iranian government over the past 2 years as a result of the rising price of world oil have done little to diminish Iran's need for foreign direct investment. According to authoritative estimates, Iran's energy sector still requires some $1 billion annually to maintain current production levels, and $1.5 billion a year to increase capacity.[18] Without such sustained capital, studies say, Iran could revert from an energy powerhouse to a net energy importer in the span of very few years.[19] Given the scope of current investment in Iran, it is unrealistic for the U.S. and its allies to expect to be able to achieve a comprehensive economic isolation. However, if broad and forceful enough, multilateral sanctions may complicate Iran's access to foreign funding, and/or force a depletion of the hard currency reserves that the regime has amassed over the past several years.

THINKING BEYOND THE UNITED NATIONS

Today, the United States has the ability to capitalize upon these vulnerabilities. International economic sanctions can help to slow Iran's nuclear progress and signal the international community's opposition to an Iranian bomb. If coupled with effective public diplomacy, such measures can also drive a wedge between the Iranian government and its people over the prudence of nuclear acquisition. Moreover, history has shown that the effectiveness of sanctions can be enhanced by the speed and scope with which they are applied.[20]

It is becoming exceedingly clear, however, that the United Nations is not the optimal vehicle by which to apply such pressure. Already, protracted diplomatic wrangling has provided Iran with valuable time to reduce its economic vulnerabilities. In recent months, Iran has carried out large-scale transfers of assets from Europe to financial institutions in China and Southeast Asia,[21] as well as initiating a major privatization of governmental funds.[22] Most recently, Iran's parliament has approved a new fiscal budget that calls for a halt to imports of refined petroleum prod-

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[15] Gareth Smyth, "Iran 'Will Need $5bn Subsidy' to Avoid Petrol Rationing," *Financial Times* (London), May 28, 2006, *http://news.ft.com/cms/s/0627359c-ee77-11da-820a-0000779e2340, i rssPage=3f6a0854-c8f8-11d7-81c6-0820abe49a01.html.*

[16] Paul Klebnikov, "Millionaire Mullahs." Forbes, July 21, 2003, *http://www.forbes.com/forbes/2003/0721/056 print.html.*

[17] Ibid.

[18] "NIOC Undertaking Host of Projects to Boost Oil Output," *Middle East Economic Survey* XLVIII, no. 19 (2005), as cited in A.F. Alhajji, "Will Iran's Nuclear Standoff Cause a World Energy Crisis? (Part 1 of 2)," *Middle East Economic Survey* XLIX, no. 13 (2006) *http://www.mees.corn/postedarticles/oped/v49nl3-50DO1.htm.*

[19] Kenneth Katzman, *The Iran-Libya Sanctions Act (ILSA)* (Washington: Congressional Research Service, July 21, 2003), 2.

[20] George A. Lopez and David Cortright, "Economic Sanctions in Contemporary Global Relations," in David Cortright and George A. Lopez, eds. *Economic Sanctions: Panacea or Peacebuilding in a Post-Cold war World?* (Boulder: Westview Press, 1995), 9.

[21] "Iran Moves Assets to China, East Asia, worldtribune.com, January 23, 2006, *http://www.worldtribune.com/worldtribune/06/front2453758.41875.html.*

[22] Meysam Salehian, "Central Bank vs. Government," Rooz (Tehran), May 10, 2006, *http://roozonline.com/english/015477.shtml.*

ucts and the institution of gasoline rationing starting this Fall.[23] The goal of these efforts is clear: to limit Western economic leverage over Iranian behavior.

Timing should also be a major consideration. In late May, Secretary of State Condoleezza Rice signaled a sea change in American policy toward Iran when she announced that the United States would join Europe in proffering a "package" of incentives aimed at bringing the Islamic Republic back to the nuclear negotiating table. Iran, in turn, has maintained that it is studying the offer and will provide a formal reply in late August.[24] It is unclear whether the international community will wait until then to seek Security Council action against Iran, but it is reasonable to expect that forceful international action still remains some weeks or months away—allowing Iran to continue minimizing economic vulnerabilities and forging ahead with its nuclear effort. All of this means that, if and when economic sanctions are again on the table, their stated task—to alter the regime's behavior with relation to its nuclear program—will be even more difficult to achieve than it is today.

Moreover, if and when United Nations sanctions do materialize, they are likely to be deeply influenced by politics. Russia and China both wield veto power over Security Council action against Iran, and while Moscow and Beijing appear to have endorsed more robust measures against Iran should the current negotiations fail, any steps taken will need to be carefully calibrated so as to preserve the support of those states. As a practical matter, this means that the economic pressure applied against Iran will be both gradual and limited in scope.

Given these difficulties, Washington would be far better served by the establishment of an economic coalition outside of the confines of the United Nations. Through such a construct, the United States would have far greater ability to control the timing, extent and application of economic pressure on Iran, without Security Council-imposed constraints. It would also provide the U.S. and its coalition partners with greater political flexibility to apply those specific measures most likely to alter Iranian behavior.

THE LIMITS OF IRANIAN OIL POWER

Today, Iran holds the ability to exert a high price from the world if it is stymied in its nuclear efforts. But political and economic realities suggest that Iran's oil power is far more limited than commonly understood.

Iran could indeed curb oil exports, as regime officials have repeatedly threatened. However, if the Islamic Republic withdraws oil from world markets, it faces the prospect of losing much-needed long-term energy clients, such as China and India, which can be expected to quickly seek replacement suppliers. Moreover, the resulting perceptions that Iran is an "unreliable" energy partner are likely to reduce foreign direct investment flowing into the country—thereby placing Iran's current status as a global energy player in jeopardy.[25]

By the same token, a cutoff of oil exports is likely to reverse Iran's recent political gains abroad. Simply put, should Iran's energy brinksmanship hurt the economies of its political allies, those countries are far less likely to unconditionally support Iran on the perceived source of the economic turbulence: Iran's nuclear program. This change will be true in spades for major investors into Iran's energy sector (such as Japan, China and France).

Most of all, Iranian officials—despite official bluster—understand that actual use of the "oil weapon" is likely to carry dire consequences for their regime. The international community's current diplomatic overtures toward Tehran have been generated in no small part by problems attaining consensus on more robust measures. Substantial Iranian interference with the global energy market could change all that, galvanizing a consensus for aggressive containment—or even regime change—on the part of numerous energy-hungry nations.

Is there a guarantee that sanctions will succeed in altering Iranian behavior and curbing its nuclear efforts? The answer is no. On the contrary, American policymakers should refrain from seeing economic sanctions as an isolated measure; historically, a strong correlation exists between the imposition of sanctions and the subsequent escalation to the use of force (e.g., Panama in 1989, Iraq in 1991, and the Balkans during the mid-1990s). However, what is clear is that a failure by the international community to promptly utilize its existing economic leverage vis-à-vis Iran will make other, less attractive solutions—chief among them the use of force—much more likely.

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[23] Christian Oliver, "Iran to Halt Gasoline Imports, Impose Rationing," Reuters, June 23, 2006; "Iran Calls Halt to Petrol Imports," BBC (London), June 23, 2006.

[24] "Iran Nuclear Response 'in August,'" BBC (London), June 21, 2006, *http://news.bbc.co.uk/2/hi/middle_east/5102544.stm.*

[25] Alhajji, "Will Iran's Nuclear Standoff Cause a World Energy Crisis? (Part 1 of 2)."

Ultimately, the United States must make a choice. Is it, and the world, willing to pay the political and economic price associated with a serious strategy to confront Iran? The alternative is to internalize a permanent hike in the cost of doing business with a region dominated by an atomic Islamic Republic.

PREPARED STATEMENT OF DR. ANDREW K. DAVENPORT, VICE PRESIDENT, CONFLICT SECURITIES ADVISORY GROUP, INC.

Mr. Chairman, thank you for the privilege of appearing today on Iran's oil and gas industries and the rather unique perspective through which my company views corporations from around the world that are financing and developing the energy-related projects that generate Iran's primary source of revenue.

By way of introduction, I am Vice President of Conflict Securities Advisory Group, a Washington, DC-based research and risk management firm that was founded 5 years ago to service a growing demand from institutional and individual investors—as well as policy practitioners—for data on those U.S. and foreign companies that maintain business ties to U.S. State Department-designated terrorist-sponsoring states. Our firm performs this research to help investors and corporations better understand their exposure to so-called global security risk, defined as the often-asymmetric financial risk to a company's share value and reputation that can accompany these business ties.

I would like to speak, first, about the broad role that Iran's oil and gas industries play in supporting virtually all facets of the Iranian government and then address the company-specific dimensions of that equation. I will also touch on the impact of U.S. policy on corporate decisionmaking regarding the pursuit of these business opportunities.

IRAN'S OIL INDUSTRY: THREE INTERLOCKING PRESSURES

In our view, three central issues define Iran's oil industry today.

(1) Iran's oil exports play the central role in financially underwriting the country's government. As oil prices increase, Tehran experiences economic windfalls that have a direct impact on the government's discretionary spending across the board. Iran has obviously benefited enormously from the recent rise in global oil prices. It is important to remember, however, that we have in the past seen periods where the opposite has been true. In the 1990s, for example, relatively low oil prices had Iran on the verge of defaulting on its international debt obligations. Had it not been for the intervention of the country's various creditors, in part through the actions of specific foreign companies, Iran would have faced a considerably more severe financial crisis.

Of course, Iran's is not the only economy that lives and dies on oil prices. The Soviet Union in the 1980s is perhaps the best case study of a government experiencing the highs and lows of relying too heavily on oil prices.

(2) Despite the lucrative nature of Iran's oil exports, its energy industry as a whole has distinct weaknesses that, since the revolution in 1979, have prevented it from reaching its full potential. Iran's oil industry is state-controlled, old, inefficient and in need of significant upgrades that only foreign companies, with their access to large-scale capital and advanced equipment and technology, are capable of carrying out. These upgrades are essential for Iran to cushion the impact of increasing domestic oil consumption and aging oil fields that are currently putting downward pressure on the country's oil exports.

In order to reach the country's stated goal of increasing daily oil production from 4 million to 5 million barrels per day by 2008 and to 8 million barrels per day by 2010, Iran will need to upgrade significantly its existing fields and begin producing from new ones. Tehran's challenge is to attract foreign investment in sufficient quantity to reach these goals, despite unpopular contract terms and intense international security concerns. As I will address in a few minutes, although companies are starting to change the way they do business in Iran due to security risk factors, in our view, security concerns are not stemming the tide of companies interested in doing business there. The real inhibitor to foreign investment seems to lie more in bureaucratic obstacles within the country.

(3) The country's gasoline-related expenditures have put added strain on Iran's budget. Despite booming revenues, Iran's lack of refining capacity has forced the country to spend billions of dollars importing gasoline. Moreover, the decision by Iran's parliament to lock domestic gas prices at 2003 levels could cause even more pronounced problems for Iran, as billions of dollars in state subsidies, which could increase under the new President, lead to increased consumption. Increased con-

sumption leaves less oil for export and, combined with decreasing production, could eventually have a material impact on export-related revenues.

Over the coming years, the intersection of these three important energy industry pressures will put the Iranian government and the companies that do business in the country at a crossroads. With Iran almost completely dependent on its energy exports for revenues and in desperate need of foreign investment to keep these revenues flowing, foreign companies will become even more important to the prosperity of Tehran.

IRAN'S OIL INDUSTRY AND PROSPECTS FOR THE FUTURE

The summary statistics regarding the role of oil in the Iranian economy tell the story: Iran holds an estimated 10 percent of the world's proven oil reserves; its oil exports generate 80 to 90 percent of the country's total export earnings and 40 to 50 percent of its total government budget.

Although the state-owned National Iranian Oil Company largely runs the Iranian oil industry, we understand that oil export revenues are effectively funneled straight to the country's central bank, also known as Bank Markazi. Accordingly, as might be expected, oil export revenues quite literally equate to discretionary funds for Tehran. Although Iran's military and nuclear spending is largely unknown—at least through public sources—it can be reasonably expected that both, in addition to most other government programs, are benefiting directly from recent oil windfalls.

To maintain these higher revenue flows, however, not only will oil prices need to remain high, but Iran will need to invest heavily in its existing and prospective energy projects. Aging oil fields require upgrades and new fields require development. Most would agree that the success of both requires billions of dollars in foreign investment, capital and technology in the coming years.

Although Tehran has not attracted as much foreign assistance as it would like, our research shows that there are a wide variety of corporations currently working in Iran's oil industry. In fact, there seems to be no shortage of corporate interest in Iran's economy. In our view, even considering the outrageous pronouncements of Iran's new president, short of international sanctions, no significant number of companies will forego the country's business opportunities. History has shown time and again that companies will do what the law allows. As long as operating in Iran is legal, the draw of a growing economy and the country's vast oil and gas resources will lure companies in. Of course, companies are aware of the political environment, but, simply put, the risk appears to be worth the reward in the increasingly competitive global energy industry.

There are, however, a few important exceptions. A number of companies have correctly identified a growing sensitivity in the U.S. investor community to business associations with Iran. The prospect of being labeled as "Doing Business with the Enemy"—the title of a 60 Minutes segment on this issue that aired twice over the past 2 years—has influenced the behavior of some companies that place more value on their corporate reputation in the U.S. than on their business prospects in Iran. For most other companies, however, this calculation is still in flux.

For at least five prominent U.S. companies, Comptroller William Thompson of New York City made this calculation a good deal easier by registering public shareholder resolutions with the SEC on behalf of the City's fire and police pension funds calling for a Board-level review of their corporate ties to Iran and terrorist-sponsoring states. Specifically, Comptroller Thompson was interested in whether their operations in Iran or these other countries circumvented the spirit, if not the letter, of U.S. sanctions law. He was referring to what some have called a major "loop hole" in U.S. law that allows U.S. companies to do business in sanctioned states via arms-length overseas subsidiaries.

After some wrangling, these companies made adjustments to corporate policy and, in certain cases, renounced any future business ties to Iran whatsoever. The five companies referenced are ConocoPhillips, General Electric, Halliburton Cooper Cameron and Aon.

In my view, two important conclusions relevant to this committee can be drawn from this anecdote. First, companies that discount escalating security concerns in their risk-reward analyses may be less likely to discount the views of leading shareholders. Second, companies most vulnerable to this market-related pressure are those who have more business or reputational exposure in the United States.

For example, let us assume that Company X and Company Y both have business ties to Iran. Company X has a large market presence in the U.S. and therefore has considerably more to lose in U.S. sales than Company Y. Company X would be expected to be more responsive to the concerns of Americans regarding its activities in Iran. In our experience, the same holds true in the capital markets. Let us say that 10 percent of Company Y's stock is held by U.S. investors, compared to 35 percent of Company X's. In this case, U.S. investors who care about Iran and, like Comptroller Thompson, act on those concerns would have more leverage with Company X and wield more influence over its corporate governance policies regarding business activities in the country. In today's global economy, market forces such as security-minded shareholder activism can be more effective than regulatory regimes.

The impact of corporate reputational concerns and market forces, however, should not only be measured by whether or not a company chooses to exit completely from Iran. For many companies with large exposure to the country, pulling up stakes is simply not an option. One positive development stimulated by increased investor, government and media attention to this issue has been a new sensitivity by companies to the structure of their corporate ties to Iran. Increasingly, foreign companies are scrutinizing their projects and transactions in Iran to ensure that they do not have the potential to contribute inadvertently to security concerns.

Some non-U.S. companies have begun to self-police their operations in Iran at standards above and beyond the requirements of their national laws to protect their reputations from potential Iran-related harm. While this may be short of what some policymakers would prefer, it demonstrates an innovative, market-oriented reaction that has a high likelihood of reducing the security risks that these corporate ties can represent.

For example, if a company's business in Iran involves the transfer of dual-use equipment or technology, there is often little the U.S. can do short of extraterritorially sanctioning the company. Were that company, however, in deference to its shareholders or reputation in the U.S. and elsewhere, to undertake additional due diligence, substitute the problematic equipment or seek contractual assurances that it will not be diverted to non-civilian projects, U.S. policy concerns would benefit. No sanctions, no international controversies, no government intervention would be entailed. Rather, in this example, the company is self-policing its business activities in a risky country in response to market forces.

Increasingly, our firm is witnessing corporations—out of concern over their reputation in the United States—insisting on certain contract terms with Iran, rather than vice-versa. In our view, this increased security-consciousness, when it occurs voluntarily, should be viewed as a good thing.

IMPACT OF U.S. POLICY

Given recent events and the importance of foreign companies to the Iranian economy, one might ask: what role does U.S. foreign policy play in the considerations of companies abroad operating in Iran. For a long time, the answer, for non-U.S. companies, has been very little. The primary impact of President Clinton's 1995 Executive Order banning U.S. involvement in Iran's energy sector was that it cost Iran access to certain U.S. technology. At the same time, it cost U.S. companies business opportunities in Iran. For foreign companies, however, the Order had little impact and business in the country continued at an even faster rate than before, as Iran was in the midst of opening up to foreign investors.

Congress then passed the 1996 Iran Libya Sanctions Act (or ILSA), which sought to punish non-U.S. companies investing more than $20 million annually in Iran's oil and gas industries by restricting their access to the U.S. economy. As a consequence of the controversial "extraterritoriality" of the law and for diplomatic face-saving, ILSA sanctions were never implemented. Soon after the act was passed, several large companies, including France's Total and Russia's Gazprom, violated its provisions and, following an official review, went unpunished. These early precedents cleared the way for other companies to do the same and, today, there are, by our estimates, over 20 companies in technical violation of ILSA.

With U.S. sanctions policy toward Iran remaining fairly consistent since the mid-1990s, one might further ask: what has changed over the past few years causing some corporations to second-guess their operations in Iran and others to enact voluntary, security-oriented governance policies with respect to these higher-risk activities? Surely, the nuclear standoff and President Ahmadinejad's election have complicated the business environment, but the beginning of today's corporate trends vis-à-vis Iran predates, for the most part, both of these developments.

Our findings demonstrate that after September 11, the stigma associated with corporate ties to U.S. State Department-designated terrorist-sponsoring states increased significantly. This stigma reverberated in the local and national press. State and municipal governments began analyzing how their retirement and other public investment funds were invested in companies that collectively form the economic backbones of these irresponsible, dangerous governments. Grassroots attention to these countries as supporters of terrorism and proliferators of weapons of mass destruction and ballistic missiles raised substantially the reputational risk associated with these corporate ties and the potential for corporate activities to be linked by the public to heightened security concerns.

This grassroots movement continues today. For example, the Missouri Investment Trust recently became the first public fund in the country to institute a policy that, after a careful review, screens out certain companies with business in Iran and other terrorist-sponsoring states. A so-called "Terror-Free" mutual fund, the Abacus Bull Moose Growth Fund administered by Roosevelt Investment Group, has likewise been created in response to market demand.

Even though, most of the time, corporate activity in Iran does not represent a significant portion of a company's overall business, the importance of the issue of terrorism in the U.S. has created the potential for such ties to negatively impact corporate share value and reputation and, in some cases, even raise questions of legal liability. Accordingly, some companies are rightfully seeking to safeguard their corporate operations from these types of associations by integrating expanded, security-minded new due diligence into their overall corporate risk management programs. To be clear, this is market-oriented cause-and-effect.

As I noted earlier, most companies are unwilling to forego the Iranian market, especially firms from countries that place huge importance on Iran as a source of energy supplies. Increased vigilance, however, with respect to the security dimensions of their business activities in the country is leading to a new sensitivity to U.S. security concerns on the part of some international companies doing business where U.S. companies cannot.

CORPORATE INVOLVEMENT

According to our Global Security Risk Monitor online research product that seeks to identify and profile every publicly traded company in the world that has any kind of business tie with terrorist-sponsoring states, over 300 publicly traded companies have carried out business with Iran during the past 3 years.

This number does not include those private or state-owned companies that are also doing business in the country. While most companies with the risk appetite to do business in Iran are these larger publicly traded entities, this does not hold true in all cases.

Nevertheless, the point remains the same: there are a large number of companies that are key participants in Iran's economy. These companies are often among the largest in the world and held in most American investor's portfolios, including the Thrift Savings Plan that invests on behalf of Members of Congress and many other U.S. public officials. Although most of these firms are involved in the country's energy sector, a number are in other sectors, contributing to Iran's efforts to diversify away from its somewhat one-dimensional economy. These ties range from petrochemical to telecommunications projects to manufacturing plants to power generation projects and so on.

Most of the larger-scale projects, however, are infrastructure-oriented and do not involve the revenue-generating potential for the government that exists in the energy sector. In fact, Iran's diversification efforts seem directed more at infrastructure projects than at launching a new era of market-oriented policies that have the potential to stimulate economic growth and, as a result, generate new streams of government revenues. Although the country may seem more up-to-date as a result, government revenues and stability remain firmly dependent on its export of energy.

The bottom line is that foreign publicly traded companies play a tremendously important role in Iran's current and future economy.

CONCLUSION

As stated, short of strong multilateral sanctions, which seem unrealistic barring some kind of serious escalation of the current Iranian nuclear crisis, there will continue to be companies looking to enter the Iranian market or expand the corporate presence. The reach of U.S. policy, therefore, is limited. These new market-oriented concerns, however, are not. In our view, it is ultimately the implications of potential reputational damage that will cause public companies to reconsider their policies and business activities. As this reputational risk increases, so too will corporate self-policing. Should companies choose to remain in Iran, they could be encouraged by shareholders and others to do so in a more security-sensitive mode than ever before. Such new corporate guidelines and due diligence measures will not be lost on the Iranian government and the state-owned companies that will have to learn to be responsive to the reputational burden that they bring to each of their prospective and existing business partners.

PREPARED STATEMENT OF DR. JEFFREY J. SCHOTT, SENIOR FELLOW, INSTITUTE FOR INTERNATIONAL ECONOMICS

Iran has long been an important player in world oil markets. Today, it is the second largest producer and exporter of oil among the members of the Organization of Petroleum Exporting Countries (OPEC). Iran exports about 60 percent of its annual oil production of about 4 million barrels of per day.

Iran has been a major beneficiary of recent developments in world oil markets. World oil prices have soared in response to (1) rapid growth in global demand, fed by voracious new users in China and India; (2) declining oil production in the OECD area; and (3) security concerns in important producing areas such as Iraq and Nigeria. While oil production has surged in Russia and increased moderately in Saudi Arabia, the increased volumes have not been enough to forestall a sharp tightening of global supply/demand balances that have propelled a massive increase in world oil prices.

Over the past decade, the volume of Iran's annual oil exports has averaged almost 2.5 million barrels per day. Over this period, the prices of Iran's light and heavy crudes have increased almost fourfold from about $16 per barrel in 1995 to the current level of more than $60 per barrel. As a result, the value of Iran's oil exports has grown from about $15 billion in 1995 to more than $46 billion in 2005 (see table 1).

Iran now pockets an extra $30 billion of oil export revenues compared to a decade ago. Oil profits fuel the Iranian economy; they also finance Iranian investment in weapons development and support for terrorism. What is good news for the ayatollahs is not so good for the United States. We are paying a high price for these developments and not just at the pump. Petrodollars make Iran more capable of pursuing its nuclear ambitions and funding Hezbollah and other terrorist organizations, and more immune to US economic coercion.

U.S. policy has tried to blunt Iranian adventurism for several decades through international diplomacy and economic sanctions. International cooperation with US initiatives have been modest, and extensive US unilateral sanctions against Iran—codified in the Iran and Libya Sanctions Act of 1996—have not achieved their difficult goals. Despite this checkered past, some US political leaders are now calling for broader economic and/or military responses to the ongoing Iranian nuclear program and support for Hezbollah. In formulating the appropriate US response to these outrages, the Congress should reflect on our past sanctions experience as well as the new diplomatic and economic conditions that will constrain the effectiveness of new U.S. and multilateral measures.

U.S. ECONOMIC SANCTIONS AGAINST IRAN: EXPERIENCE TO DATE[1]

The UniteStates first imposed economic sanctions against Iran in response to the hostage crisis of 1979–1981. The comprehensive trade and financial sanctions eventually provided a crucial negotiating chip to win the release of the American hostages on the day of President Reagan's inauguration.

A few years later, Iran was implicated in the terrorist bombing of a Marine Corps barracks in Lebanon. Iran was added to the US list of countries that support terrorism. In incremental steps, the United States imposed new restrictions on US trade with Iran targeted primarily at limiting development of the Iranian oil industry and thus its capability to fund terrorist groups. Subsequently, concerns about Iran's nuclear power programs prompted additional US sanctions to impair the military potential of Iran, particularly regarding the development of chemical, biological, and nuclear weapons. The Iran and Libya Sanctions Act (ILSA) of 1996 supplemented these measures with additional restrictions on foreign companies that undertake new oilfield investments in Iran.

Overall, sanctions have not prompted Iran to renounce the use of terrorism or the acquisition of nuclear weapons. While other industrialized countries also implemented narrowly targeted trade sanctions designed to limit Iran's access to products and technologies that could support the production and delivery of nuclear, chemical, and biological weapons, they continued to trade extensively and invest in Iran. Meanwhile, other countries supplied Iran with arms and nuclear equipment and technologies.

The ILSA sanctions did lead some companies to defer bidding on new contracts to develop Iranian oil and gas properties. US sanctions deserve some of the credit, but most of Iran's problems in attracting new investment were caused by self-in-

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[1] This section draws heavily on the Iran case study from the forthcoming 3rd edition of Economic Sanctions Reconsidered, by Gary Hufbauer, Jeffrey Schott, Kimberly Elliott, and Barbara Oegg (Washington: Institute for International Economics, forthcoming 2007).

flicted wounds created by its own domestic policies. Despite these problems, Iranian oil production has grown modestly over the past decade since ILSA was enacted.

The appendix to this statement provides a chronology of the key events in the decades-long sanctions effort. It sets out a troubling story that brings to mind Yogi Berra's insightful commentary: "it's déjà vu, all over again". The same problems confronting US policy two decades ago now again dominate the headlines: funding terrorists in Lebanon, testing North Korean missiles, and Iran's pursuit of nuclear weapons. Economic sanctions have not blunted Iran's foreign adventurism, though they undoubtedly have inhibited the task and made it more costly to pursue.

ECONOMIC SANCTIONS AGAINST IRAN: NEXT STEPS

The Congress is now considering extension or expansion of the ILSA sanctions against Iran. Drawing counsel from the IIE study on sanctions, based on 25 years of research and the authors' personal experience in formulating US sanctions policies in the late 1970s and early 1980s, I believe the current law should be renewed as is. But Members of Congress should make a realistic assessment of the benefits that can be obtained through the deployment of sanctions.

Can sanctions stop Iran from eventually developing a nuclear weapon? Probably not. Iranian leaders have been developing this capacity for more than two decades-despite diplomatic entreaties, limited economic sanctions, and the threat of military strikes. They believe that nuclear weapons will bring them regional dominance and that—just like India and Pakistan—the West will grudgingly accept their accession to the nuclear club without significant retribution.

Nonetheless, history shows that targeted sanctions can push back the day of reckoning. Since the Nuclear Non-Proliferation Treaty entered into force in 1970, four countries have acquired nuclear weapons: Israel, India, Pakistan, and North Korea. The latter three were subject to significant US sanctions and some multilateral measures. Economic sanctions did not prevent proliferation but collective denial by Western powers of key ingredients of the bomb maker's art—reprocessing technology, centrifuges, tubing, metallurgy, timers—substantially slowed the process.

Sanctions will not prevent a determined and well financed country from eventually crossing the nuclear threshold. Even the tightest sanctions regime can be evaded with sufficient incentive. Witness the billions of dollars of goods smuggled into Iraq during Saddam Hussein's reign. Land borders are porous, especially in the Middle East, and sea and air freight are difficult to monitor effectively without intense military operations. With Iran's petrodollar bonanza, it will be able over time to procure the necessary material and technology to achieve its nuclear ambitions.

To be sure, comprehensive economic sanctions against Iraq, which were generally respected by the major powers including China and Russia, arguably contributed to thwarting Saddam Hussein's nuclear program. Since those measures coincided with low oil prices, little economic pain was felt in the world at large, even though Iraqi oil shipments were sharply curtailed. This fact was crucial to global cooperation in enforcing U.N. sanctions for more than a decade.

Broad economic sanctions, comparable to the isolation of Iraq in the 1990s, are no longer feasible. Unlike the cheap oil of the 1990s, oil prices today are at or near record levels. Given tight global supplies, Iran has greater leverage to counter sanction major oil consuming nations by cutting back its oil exports. Few producing nations have the spare capacity to increase shipments to offset potential Iranian cutbacks, so prices would likely rise sharply. Iran would sell less—and earn more.

For that reason, it's hard to find politicians who would support a comprehensive sanctions strategy. Many Americans would question harsh measures that might push oil above $100 per barrel and trigger a world recession. Europe, China, and Japan have similar concerns and would only endorse sanctions that are paced and mild, not sudden and harsh. Russia will be even more ambivalent, for two reasons: it has gained a lot from the oil price spikes generated by Mid East tensions since its oil production has increased by almost 50 percent since 2000 to 9.5 million barrels per day; and it wants to continue to cultivate Tehran as its best foothold in the Middle East.

So what should we do? The most immediate and obvious task is continued denial of critical components (e.g., cascade centrifuges) for Iran's nuclear industry. The policy already receives support from the major powers but additional efforts should be made to ensure that second tier powers undertake and enforce these restrictions as well. Other targeted sanctions against Iran's ruling class should also be considered, including travel restrictions and overseas asset freezes. These measures will have minimal impact on Iran's financial ability to finance terrorism or build a nuclear bomb. Rather the strategy of limited sanctions, accompanied by coordinated diplomacy, is to let time mellow Tehran's nuclear intentions. This is a less than satisfying result but effectively what we can achieve, given current conditions in world energy markets.

Table 1.—Iran: Petroleum Production, Exports and Revenues, 1995–2005

	Production[a] (1000 barrels/day)	Crude oil exports[b] (1000 barrels/day)	Value of petroleum exports[b] (millions of dollars)	Iran light crude[b] (spot price per barrel, $)	Iran heavy crude[b] (spot price per barrel, $)
1995	3,744	2,621	14,973	16.17	16.26
1996	3,759	2,630	19,441	19.03	18.49
1997	3,776	2,587	15,553	18.24	18
1998	3,855	2,512	10,048	11.97	11.45
1999	3,603	2,291	16,098	17.25	16.93
2000	3,818	2,492	25,443	26.75	26.02
2001	3,730	2,185	21,420	22.9	21.67
2002	3,414	2,094	19,219	23.52	23.09
2003	3,999	2,396	26,124	26.89	26.33
2004	4,081	2,684	34,289	34.6	33.06
2005	4,049	2,700[c]	46,600[c]	50.66[c]	48.32[c]

[a]Source: BP Statistical Review of World Energy 2006.
[b]Source: OPEC, Annual Statistical Bulletin (2004).
[c]Source: Energy Information Administration, Department of Energy; price data as of December 30, 2005.

APPENDIX. U.S. Sanctions Against Iran: Chronology of Key Events, 1984–2006

23 January 1984	Alleging Iranian involvement in Marine base bombing in Lebanon, US State Department adds Iran to list of nations supporting terrorism, and thus subject to stringent export controls.
26 October 1987	President Reagan invokes section 505 of the International Security and Development Cooperation Act of 1985 and embargoes all imports from Iran, prohibits export of 14 types of potentially militarily useful goods, including inboard and outboard motors, mobile communications equipment, electrical generators, hydrofoil vessels.
15 March 1995	President Clinton issues executive order barring US citizens and companies from financing, supervising and managing oil development projects in Iran-blocking Conoco's pending $1 billion investment in Iranian offshore oil project.
30 April 1995	Citing proliferation and terrorist concerns, the White House announces it will ban, effective 8 June 1995, all direct US trade with Iran, as well as an estimated $4 billion in indirect trade, mainly by American companies selling Iranian oil in third countries. French, German and British officials call sanctions the wrong approach and announce they will continue their policy of "critical dialog" with the Iranian regime. Oil analysts estimate that Iran will have no trouble finding buyers for its exports to replace American companies.
7 March 1996	US and Israeli intelligence sources allege Iranian involvement in a recent wave of terrorist attacks in Israel.
2 May 1996	US military officials charge Iran has acquired Nodong II missiles from North Korea and is building underground bunkers to deploy them.
23 July 1996	The House passes Senate version of the Iran and Libya Sanctions Act (ILSA), which penalizes companies investing over $40 million in 1 year in Iran's oil and gas sector; after 1 year, the annual investment limit triggering sanctions drops to $20 million. Potential sanctions include two or more of the following: (1) denial of credits from the US Export-Import Bank; (2) denial of export licenses for controlled goods or technology; (3) prohibition of loans of more than $10 million from US financial institutions for a 12-month period; (4) prohibition of foreign financial institutions from dealing in US government debt or US government funds; (5) prohibition against participation in any US government procurement project; (6) import restrictions. Sanctions are required to be in effect for up to 2 years, and in "no case" can they be applied for less than 1 year. The President may waive all or part of the sanctions against a foreign company if doing so is deemed to be in the national interest. Bill sunsets 5 years after enactment unless Congress votes to extend.

APPENDIX. U.S. Sanctions Against Iran: Chronology of Key Events, 1984–2006—Continued

19 August 1997	President Clinton issues an executive order that explicitly prohibits re-exports of US goods, technology and services to Iran.
21 February 1998	Despite US objections, Russia decides to expand role in building nuclear power plant in Iran.
22 July 1998	Iran tests a missile with an 800-mile range, capable of reaching Israel. American officials say the "Shahab 3" missile came from North Korea.
25 November 1998	Russia signs an $800 million deal to finish building the Bushehr nuclear power plant in Iran; announces it may bid on three more nuclear reactors for $3 billion. Russia assures US that agreement concerns peaceful nuclear cooperation only.
23 February 1999	US imposes import sanctions on 10 Russian entities for giving assistance to Iranian nuclear and missile programs.
28 April 1999	President Clinton announces that the US will exempt exports of food and medicine from future sanctions imposed by the executive branch. The new rules also apply to food and medicine sales to Iran, Libya, and Sudan, which will be permitted on a case-by-case basis. Specific licensing rules will be drawn up for each country and there will be no US government, funding, financing or guarantees for the sales.
Early Dec. 1999	US officials say that intelligence reports suggest that Iran has recently increased aid to terrorist groups opposing the Middle East peace process.
15 March 2000	President Clinton signs the Iran Nonproliferation Act of 2000 into law. Act requires the president to send report to Congress identifying countries and entities assisting Iran with its weapons programs and gives the president the authority to impose sanctions on these countries but does not make sanctions mandatory. The Act also bars the US from making "extraordinary" payments to the Russian Space Agency to build the International Space Station or any other organization of the Russian government until the president determines that Russia is actively opposing proliferation in Iran. The president may waive sanctions for national security reasons.
17 March 2000	Secretary of State Albright announces that US will lift ban on Iranian non-oil exports such as carpets, caviar, pistachios and dried fruit, and states that US will increase efforts to reach a settlement to all legal and financial claims between the two countries and to reduce barrier to cultural exchanges. US sanctions barring American investment in Iran's oil sector, however, remain in place.
14 April 2000	US government determines that five entities in North Korea and Iran have engaged in missile technology proliferation activities that require imposition of sanctions under the Arms Export Control Act. Sanctions are largely symbolic.
27 July 2001	Congress renews ILSA for another 5 years, despite opposition from the US business community and the Bush administration. The "ILSA Extension Act of 2001" requires the president to submit a report to Congress within 24 to 30 months on the effectiveness of the sanctions, their impact on other US economic and foreign policy interests and the humanitarian situation in Iran and Libya. European Commission criticizes the ILSA extension and threatens to retaliate if sanctions are imposed against European companies.
13 February 2002	US blocks Iran's bid to join the WTO.
25 July 2002	Under the Iran-Iraq Arms Non-proliferation Act of 1992, the US sanctions nine Chinese companies and one Indian entity for selling prohibited goods to Iran.
21 October 2002	Russian officials refuse an American proposal to lift restrictions on the import of spent nuclear fuel into Russia (which can be reprocessed to make enriched uranium or plutonium for nuclear weapons) in return for Russia's ceasing all atomic cooperation with Tehran, including the construction of the Bushehr reactor.
21–22 February 2003	IAEA Director General Mohamed ElBaradei visits Iran to make nuclear inspections and urge Iran to sign the Additional Protocol to the IAEA Safeguards Agreement, which would require an increase in the transparency of the Iranian nuclear program and provide the IAEA with increased access.

APPENDIX. U.S. Sanctions Against Iran: Chronology of Key Events, 1984–2006—Continued

May 2003	Responding to US pressure, Russia informs Iran that it will not deliver the nuclear fuel for Bushehr unless Iran signs the Additional Protocol.
4 June 2003	Russia changes course from its May 2003 announcement, now declaring it will not link the supply of nuclear fuel in Bushehr to Iran's signing of the Additional Protocol.
6 June 2003	IAEA report to its Board of Governors concludes that Iran has failed to meet its "safeguards" obligations by failing to fully account for nuclear material imported from China in 1991.
10 November 2003	IAEA report to its Board of Governors condemns Iran for 18 years of manufacturing enriched uranium and plutonium as part of a secret nuclear program.
18 December 2003	Iran signs the IAEA Additional Protocol.
13 March 2004	IAEA Board of Governors unanimously rebukes Iran for failing to disclose significant aspects of its nuclear program. In February 2004, US investigations into the nuclear network masterminded by AQ Khan of Pakistan (the father of Pakistan's nuclear bomb) uncover Iran's plans to build advanced P2 reactors for enriching uranium. Retaliating against the IAEA rebuke, Iran immediately bars nuclear inspectors from entering the country.
28 October 2004	Iran and China sign a preliminary agreement to allow China's Sinopec Group to develop Iran's Yadavaran oil field in exchange for agreeing to buy 10 million tons of Iranian liquefied natural gas annually for 25 years.
26 May 2005	Prompted in part by Iran's recent nuclear cooperation in negotiations with the EU, the US announces it will allow Iran's WTO membership talks to begin.
4 February 2006	IAEA governing board refers Iran to the U.N. Security Council over concerns that the country is developing nuclear weapons.
14 February 2006	Iran resumes uranium enrichment. Earlier, Iran announced it would no longer permit surprise inspections of nuclear facilities.

Source: Gary Hufbauer, Jeffrey Schott, Kimberly Elliott, and Barbara Oegg. Economic Sanctions Reconsidered: History and Current Policy. Third Edition. Washington: Institute for International Economics, forthcoming 2007.

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