DR. HAYES: Good morning. One of the issues that came up earlier was about implementation of existing trade agreements. And I'd like to make a comment on that before I begin my formal presentation.

I'll begin with a story. In the last round of negotiations, we got the Philippines to agree to import 30,000 tons of pork. And they signed on the dotted line. It should have worked.

If you looked at Philippine pork prices, they were high relative to our markets. So they should have imported the pork.

Now, they had to allocate licenses to do that. And the Philippine government allocated the licenses to the Pork Producers Association. It obeyed its legal rules, which was to allocate 30,000 tons of licenses. And it gave those valuable licenses to pork producers who had no interest in importing.

And of course, the Philippines did not import.

And I think there is a solution to issues like that that economists could give. Usually these negotiations are written by lawyers.
If you had one additional economist in the room, you might have an additional criteria that after the agreement, Philippine pork prices should not have deviated so strongly from other prices.

And so, if you have an agreement in the future that says that a country will have a 50 percent import tariff, then you might have an additional provision that says that prices in that country should not be 50 percent greater than delivered prices from the rest of the world.

And that kind of provision, in addition to the legal arguments, might prevent a lot of difficulty in the future.

I'm going to begin my formal presentation now. But I hope you'll think about that other issue.

At Iowa State University and in Missouri, we have a group that analyzes agricultural markets. I was in charge of that group at Iowa State until about two years ago. I'm no longer with that group.

And the first chart I show you are that group's projections on agricultural exports over the next ten years. It has history on there, that shows what's happened to agricultural exports over a recent
period, and then, projections into the future. (SEE INSERT 1)

Now, the group is somewhat conservative. It's called FAPRI. But in my opinion, it's about as good as you're going to get.

And that first chart shows a very modest increase in agricultural exports from the U.S.

If you turn the page, you'll see a breakdown on that pattern, and it shows you where the additional exports will come from. (SEE INSERT 2)

The top graph shows charts on crops. And as one of the previous speakers mentioned, our exports of U.S. crops have been disappointing. In fact, they have been flat, and our market share has fallen. And the projections show that our market share does not increase over the next ten years.

However, if you go to the bottom line, you'll see that world markets in livestock products have grown rapidly, and moreover, the U.S. share of those markets has grown rapidly.

Now if you look at pages 4 and 5, you'll see detail on the pattern of agricultural exports from 1961 to the year 2000. (SEE INSERT 3)
And those exports show U.S. exports of pork, poultry, and beef. And there's a very similar pattern across all of them. In about 1986, exports go up from essentially zero and begin increasing almost astronomically.

The focus of much of my research for the last several years has been to understand why our exports of grain have been flat and our exports of livestock products and other value-added agricultural products have been so significant. And now I'd like to hit a few key points there.

One issue is that, in about 1986, we discovered how to export meat without freezing it. When you freeze meat, you ruin the quality, at least in the minds of some consumers. And by figuring out how to get meat to Asia without freezing it, we essentially reduced the meat transportation costs.

So Japan, faced with a decision as to whether to import corn and grow pigs or to import the pork directly, had an additional incentive to import the pork directly.

And we began to see all of our additional agricultural exports in the form of value-added
products rather than in the form of the raw commodities.

A second reason is that our dollar began weakening in that period.

And one of the key insights I can give you is that, if a Japanese importer is looking at our pork or beef or chicken, they look at the feed grain costs of that meat, but they also look at capital costs and the labor costs.

And when we have a strong currency, our capital and labor appear expensive. So a strong currency tends to encourage the exportation of the raw commodity, the grain, and a weak currency tends to favor the exportation of our value-added products.

So when we have a weak currency, as we have had over the last ten or so years, over the period since 1986 to recently, we tend to get a boom in value-added exports, because our capital and our labor seem reasonable and, therefore, very competitive.

And if the currency gets strong, as it has recently, then we may revert to the more traditional pattern of exports of raw commodities, before value is added elsewhere.
And so those two factors alone probably explain why we saw the conversion away from raw commodity exports towards value-added exports since 1986.

And one point I'd like to make about the FAPRI analysis, it seems that everything is based on patterns that we see at the moment, the trade agreements we see at the moment and transportation costs and currencies we see at the moment.

So if you're prepared to change future currencies, then you will see different patterns of agricultural trade.

Also, the FAPRI analysis I mentioned earlier does not take into account new trade agreements. And you've probably figured out by now, I'm from Europe, and I know a lot about European trade agreements.

And the one thing that seems to have gone unnoticed in the U.S. recently is that, in March of last year, the Europeans adopted essentially Freedom to Farm and have began allowing their domestic prices to fall to our levels.
The analysis we do at Iowa State suggests that over the next five or six years, most European prices will hit world price levels. European farmers are not unhappy with that because they're getting direct income payments.

But it does mean that, in the next trade round, you're not going to see as much opposition in Europe to changes in tariffs.

I think the U.S. might be pleasantly surprised by a willingness of Europeans to reduce export subsidies and reduce import tariffs because they have essentially adjusted their system to accommodate that in advance.

Also, if you look at countries like China, where food security has been of incredible importance, that's slightly less important now, and so there may be some real opportunity in the next round for changes in agricultural rules.

I think most people would say that in the past we got agricultural products in countries like China that was a great achievement, but the rules we implemented were not that serious.
I think in the next round, we may see some serious opportunities for agricultural trade and much greater agricultural export opportunities.

The last point I want to make is about China. I've been over there a lot lately.

They have much more of the world's people than they have land. That means somebody else has to have more land than people, and that is North America and the former Soviet Union. So we're ideal trading partners.

If China does open, we're going to see big export opportunities.

We've done some economic analysis. The numbers are just enormous. They're so enormous, we don't even bother trying to publish them, because nobody would believe them.

But if you take 1.2 billion and multiply it by anything, you get big numbers.

And when we did it for pork, for example, China begins needing to import feed grains because they have prosperity and more consumption of protein or grain-rich products.
Once the country imports feed grains, it becomes like Japan. Its meat industries become uncompetitive because their farmers are paying world feed grain prices plus transportation costs, which makes them uncompetitive, and eventually China imports large quantities of meat.

So those issues such as new trade agreements, and in particular, the accession of China to the world trade, could potentially dramatically increase the projections of U.S. exports over and above those in the base line numbers I've provided to you.

As they say in Congress, I yield my last 1.28 minutes.
U.S. Agricultural Export Potential

Dermot Hayes
Pioneer Chair in Agribusiness
Professor of Economics
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Value of U.S. Agricultural Exports

<table>
<thead>
<tr>
<th>Year</th>
<th>Billion Dollars</th>
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<tbody>
<tr>
<td>1988/89</td>
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<td>1991/92</td>
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- Animals and Animal Products
- Oilseeds and Products
- Grains and Feeds
- Cotton
- Other Products
Impact of New Trade Agreements

- In the spring of 1999, the E.U. adopted a set of agricultural policies that will bring internal prices down to world levels within 5-10 years.
- The absence of E.U. opposition, plus a reduction in food security concerns may allow for real reductions in export barriers in agricultural markets.
- Most of the barriers currently in place restrict value added exports, and these may grow very quickly.