MS. TYSON: Okay. Fine. I did print something up, and I'll just sort of run through. I made a series of points which are vaguely related.

Since the focus of this is on high technology industries, I start with some of their particular characteristics, such as the fact that they employ more higher skilled and trained workers, pay higher wages, invest greater amounts in R&D and are, in fact, more export intensive than most other sectors of the economy.

High technology industries, especially in information technology, have been the foundation for the strong expansion of the American economy in the 1990s. Business expansion on information technology has been more than one half of all investment spending. And investment spending has been very strong in this economic expansion.

So, the point is that I really believed, and I wrote a book at the beginning of the 1990s arguing that going forward the special characteristics of high technology industries made them of particular importance to continuing growth, productivity growth, and living standards in the United States. And certainly I would say that we've seen in the past seven years of expansion, throughout the 1990s, has shown that high technology industries indeed are particularly important.

At the beginning of this decade there was a lot regular concern about the competitive position of several high technology industries. And coming out of trends in the '80s there was reason for those concerns. In terms of trade, the most concerting numbers were shares of U.S. producers in high technology product markets around the world. And there were signs of erosion in that position.

The good news is that this erosion has been reversed during the 1990s. And I list several factors that I believe have played a role in this reversal: an improvement in U.S. productivity; a rapid diffusion of Internet and e-commerce technologies in which the U.S. has a commanding lead; the competitive strength of the U.S. venture capital market. So, as we went through this subterranean revolution, we were particularly well equipped to invest in the development of new products. A sound macroeconomic environment has helped increase the availability of capital. And then we have trade policies to liberalize trade through bilateral, regional and multilateral negotiations. So, there were several things that conspired together to reverse the erosion of the U.S. competitive position in high technology industries.

Now, I then go on to make an argument for continuing down the path of trade liberalization that we have embarked upon -- continued upon. Not embarked upon, but continued upon in the 1990s. In particular, the high technology industry, where there are frequently economies of scale, access to larger markets is very important to producers in terms of their ability to drive down their cost, increase their quality, and improve their productivity, so that access to the rest of the world, the rest of the world's consumers, the rest of the world's markets, is particularly important to high technology producers, and that's why trade liberalization is particularly important to them.

A recent study authored by Catherine Mann, who I just understood has testified before you, finds that trade encourages and diffuses the fullest uptake of globally available, technological innovations, so that in fact trade is complimentary. R&D is going to generate innovation and improve productivity growth. Trade and greater competition are going to encourage the diffusion of technological change, and therefore, encourage an increase in trend productivity growth. And indeed there's at least some evidence now that one of the reasons why productivity growth picked up in the

United States is that we have been increasingly more open in the 1990s.

So, my testimony really is a statement in favor of continuing openness. Now, there are lots of things that happened in the 1990s on the trade front. And I think in terms of a focus on high technology industries, the things that are probably the most important are the information technology agreement which eliminated tariffs on $600 billion of trade in high technology manufactured goods; the basic telecom agreement which has improved the access of American companies to the one trillion dollar market in world telecommunication services; and the financial services agreement in so much of financial services, both in terms of product and process is now high technology. I include that as part of our area of trade where our technological advantage shows up in the service advantage, and then shows up as benefited by the financial services agreement.

All of these agreements and then the Uruguay round and NAFTA and other agreements, all of them have been part of the reason why the share of trade in goods and services in the U.S. output, U.S. GDP, has increased some 20 percent in 1991 to nearly 30 percent now. And that's a fairly significant increase. And it really does say that we are living in a world that the U.S. economy is more interdependent. And during the time that the U.S. economy has become more interdependent, it has done extremely well. So, anyone who is concerned about the trade position of the U.S. has to accept that -- has to realize that in this decade, while we in fact were running a persistent trade deficit, our economy was doing better than the competition. Our underlying competitiveness was improving and markets around the world were becoming more liberalized. All of those things were happening at once.

Now, what I want to say about what I think has brought your Commission together, which is the dramatic deterioration in the U.S. trade account, particularly in the last two years, and that's spilling over into the current account. So, we now have a current account deficit that is approaching three percent of GDP. Those developments were not the result of either greater protection abroad or eroding competitiveness at home. There's no evidence at all that there was greater protection abroad, in fact, quite the opposite. The Uruguay round, NAFTA, and all of these trade agreements that I talked about were actually reducing protection around the world.

Nor is there any evidence of a love of competitiveness at home. In fact, in the last four years we've had faster than expected productivity. We've had the explosion of the Internet revolution. We have had the greatest expression of entrepreneurial and venture capital ever seen in our country or in the world. So, this has been an extremely competitive dynamic part of the U.S. economic history of this decade, and yet at the same time the trade deficit climbed dramatically. So, what can one attribute this too? I think the answer is very clear. There was a very sharp slow down in growth in many of the markets that we trade with. Forty percent of the world economy went into recession. Seven major economies with which we trade contracted by six percent or more. Tens of millions of jobs were lost in countries that we export to. It is not a surprise that our exports reversed in the sense of growing at 10 percent a year in the year 1996 then stagnating in 1997 and stagnating in 1998. I've got the year wrong. Started stagnating in 1998 and continued into 1999.

So, when you look at the numbers it seems pretty clear that what happened to the U.S. is something that happened to the rest of the world, and the U.S. suffered as a consequence only in terms of an erosion in its export market. The rest of the world suffered in terms of slowing growth, recession, unemployment, bankruptcies, huge debt burdens. The

U.S. saw slowing export growth and cheaper imports and an inflow of capital to the United States because we were a safe haven, and lower interest rates than we otherwise would have seen.

In fact, in 1997 I remember -- in mid-1997 when the financial crisis started there was a lot of concern that the effects on the U.S. economy would be negative and that they would play out through the trade balance. Well, in fact, we did see the deterioration of the trade balance that was predicted, but the effects on the U.S. economy can hardly be described as negative because all of the other things happened as well. Interest rates fell. Capital came flowing in. Commodities prices fell. The dollar strengthened, making our terms of trade even more attractive. So, I think it's fair to say that my profession tended to miss the various ways in which the global financial crisis would help the U.S. inadvertently.

Another thing I want to say about the last couple of years, which I think is really a testimony to the wisdom of the trade policies that have been pursued is this is a very serious recession for many parts of the world. And the last time we saw anything quite as serious, and that was in the 1920s and 1930s, what countries did was they got involved in a series of protection, retaliation, protection, retaliation, which brought everyone down, including the United States.

This time the countries that were most severely affected did virtually nothing to restrict imports. Their imports, in fact, slowed down precipitously because their income fell. But there was not an imposition of higher tariffs or higher quotas or any effort to reverse the liberalization of trade that has gone on, leading up through, say, the Uruguay round. So, I think that's actually a real evidence that we did the right thing. Countries did not make the situation worse for one another through beggar thy neighbor policy.

Now, what does all of this suggest about U.S. trade policy for the future? I am a proponent of continuing trade liberalization. I think the U.S. should emphasize the issues such as continued service liberalization. If you look at the U.S. trade deficit what you see is a large deficit of manufactured goods and a surplus on services not big enough to offset the deficit in manufacturing. But it's growing. And we need to do whatever we can to continue to make services like financial services, telecommunication services, environmental services, travel services, open markets where we clearly have a competitive advantage.

We also secondly, within this liberalization, have to worry about new products and new processes made possible by technology. Such things as telemedicine, satellite delivery of entertainment and education to households. What does it even mean to have open market access in those kinds of activities. What kinds of policies do we need in the areas like intellectual property protection, anti-trust policy, internationally or multilaterally, so that we can deal with the development of these major new kinds of activities.

Of course, the other issue is the U.S. effort to extend the moratorium on the imposition of tariffs on electronic transmissions or duty free cyberspace initiatives, which I certainly support.

So, that's the first point. Continued trade liberalization focused on those issues that where there are new products, new processes and services where we really do have a competitive strength.

As far as the trade deficit is concerned, I think that increasing wealth in the rest of the world will have some salutary impact, and we are seeing the rest of the world gradually do better. At the same time, as the rest of the world does better, the rate of return on investments abroad will arise. This may encourage investors to move money out of the United

States. That is quite likely to cause a drifting down of the dollar. And that also will help close the U.S. trade gap.

So, as the world expands there are two channels. There is greater income growth abroad and there is also likely to be a weakening of the dollar as investment capital moves to the rest of the world. Both of those will bring down the trade deficit.

And then finally on the domestic front, as far as high technology industries are concerned, I think the key things are continuing support for research and development, and continuing to work on the skills issue and the shortage of skills for high technology industries. I'll stop there. I saw the red light come on several times. I apologize.

COMMISSIONER KRUEGER: Thank you very much. We'll be back with questions in a moment, but first we'll ask Brian McEachron to give his opening statement.