

MR. FARROW: Thank you, Commissioner Becker.

I'm representing myself as opposed to thousands of people, though with the usual humility of an economist, I claim to consider the well being of the entire country, not just one sector or interest group.

Among other experiences, I've worked in the Executive Office of the President for both a Democrat and Republican. I've advised the environmental arm of six foreign governments. I've had consulting clients that range from the Audubon Society to Exxon. I was a partner in an organic farm for 15 years. I currently direct Carnegie Mellon University's Center for the Study and Improvement of Regulation, whose focus is on environmental health and safety regulation.

I view economics as a discipline, because it has a stopping rule. There are circumstances where government intervention is justified and others where it is not. For environmental issues, the key cause of intervention are real externalities where one person's actions affect another outside the direct transaction, and pollution is a prototypical case.

The prescription for efficiency is to act until the additional costs and benefits are balanced. However, finding the additional costs and benefits of either environmental damage or other kinds of activity clearly varies culturally and by income. While

technological details define whether actions cross international borders or not and whether it's desirable to spread impacts, such as pollution, as Treasury Secretary Summers advocated in his controversial memo several years ago, or whether we want to concentrate pollution in a limited area, depends on specific details.

There are now several general lessons from the U.S. regulatory experience on environmental matters. One is that well-designed regulations that deliver environmental improvements at low cost, serve both international competitiveness and domestic purposes. We're also learning how to use information in the marketplace to better inform consumers, as through labeling. Finally, the environmental lesson from the former Soviet Union is that words on paper do not make a policy. It's our monitoring and enforcement mechanisms, even of economically based policies, that define the success of U.S. environmental policy.

Now for a few specifics. Are differences in environmental regulations significant determinants of international trade, and therefore, a significant cause of the trade deficit? In general, the answer is no. Everywhere but perhaps especially where environmental regulations are somewhat important, we should see cost-effective designs, although the cold

logic of economics may suggest that some relocation is efficient. I do have something on equity below.

Number two, does one size of international environmental regulation fit all? No. Let me proceed by analogy. As a younger person, I worked as a warehouse laborer in the foundry industry in Los Angeles. I gladly took jobs I would refuse today, because I'm wealthier, and my time is currently more valuable in other uses. But I respect that these are real jobs to be done. So, too, with countries. We should be careful about imposing our choices of development jobs on a country from our wealthy position in the U.S. when it's all too easy to forget about the role of trade and the tough jobs our country took on as we developed.

Number three, do non-regulatory decisions matter to the environment? The answer to that is yes. Environmental decisions are embedded in the millions of choices that businesses and consumers make every day. These individual and visible transactions are responding to price signals and preferences. Our development path is different because of these choices, and like the drops of rain that make a flood, it is these choices that determine the aggregate trade flow.

I support the primary task of reviewing the cause and effect of trade and the trade deficit to be

the identification of areas where the price signals are incorrect to the American consumer and producer. Given my understanding at the current time I do not believe that environmental issues are causing pervasively incorrect price signals to consumers or producers.

Number four, are there special cases to spur action on the environment when scientific knowledge is incomplete? Sometimes. I'll summarize this as cases where there is uncertainty and irreversible actions. This overlaps somewhat with the concern for the precautionary principle, and economists' recent work on real options indicates that this principle can cut both ways. At times there are environmental irreversibilities; at times there are industrial or business irreversibilities, and what we need is a better analytical footing for that precautionary principle.

Regarding equity, a prescription for equity or fairness is generally avoided by economists, but even Nobel Laureate, Robert Solow, has stated, "There's something faintly phony about a deep concern for the future combined with the callousness about the state of the world today."

Economists tend to add up costs and benefits to whomsoever they accrue based on potential compensation criteria developed almost 60 years ago.

The modern focus on equity suggests to some economists that actual compensation, to the extent it does not alter incentives, should be considered in place of potential compensation.

Another item are environmental assets -- and I see my warning light coming on here. On environmental assets, looking towards the future and issues such as the development of tradable pollution rights, perhaps through the Kyoto Protocol or other agreements of that sort, these could have significant implications for the kind of trade and financial flows you're talking about. The environmental assets might be allocated in different places of the world and a type of new environmental asset trading takes place.

So, I want to sum up by saying that I find that, first, that environmental issues can justify government intervention up to a point, although the aggregate impact on trade of current environmental regulations appears to be small; that such intervention should take place with regulatory designs that reduce the financial burden of compliance; that there are few environmental issues that justify international action to establish appropriate economic incentives to consumers and producers, and that those actions with truly international externalities should be separated

from those where they impose our preferences on the  
development paths of other nations.

Thank you.