

ways and for government in turn to fulfill some functions such as basic research funding, establish technological priority direction, and other such systems that focus on "ends" rather than "means".

Unfortunately, in some countries there is still a lack of communication between government and industry. In Japan and Germany the government generally seems willing to listen and to accept advice from industry, however, in the United States that relationship is not as effective as it should be. Industry should use its informal power of influencing government. A problem still unanswered, which will become even more important in the coming years, is how large systemic innovations become introduced since nobody formulates them. This applies to environment, energy, safety, health, and urban transportation. These innovations must often be triggered by government."

4. "When government does participate in industrial R & D then politics may start to enter and the company reduces its flexibility. The company is less in control of its own fate. Projects are less adaptable and the industrial independence is often lost. The very nature of the interaction between government and industry puts a certain rigidity into the system.

With government intervention in industry it can become more difficult to start and stop particular projects as well as changing directions. On independent projects, new directions may be suggested by the events of new discoveries in science and technology. They may be very much better than the original plans. By preserving individual company freedom, the firm may enhance its ability to innovate rather than the other way around.

There are many examples of companies in the United States that, as a matter of policy, would not accept government participation in their research projects. These companies do not want to introduce any element of rigidity into their R & D plans. Some companies that are pursuing such a policy do have a very high rate of innovation."

5. "There is essentially a division in thinking between those who see a passive role for government and those who would like to see a more active role regarding industrial innovation. In the United States, the role of government is less than in the United Kingdom, Sweden, and many other countries. Priority consideration for