

Mr. STOBAUGH. Thank you. What happens then is that Du Pont will build here first and others will build here first with their new product. Then they expand these plants very rapidly because the U.S. market expands rapidly and this is where they are making their intensive market effort.

As the plants expand that lowers production cost and another thing that happens is they get a lot of experience in operating the plant and that makes their costs go even lower. As a result the country that first commercialized a product has an export advantage for quite a while. There are a number of studies which show this, that the initial country, which is frequently a large market country and frequently the United States, does have this export advantage.

Now, sooner or later if a product is commercialized here, plants will be built abroad but, as I indicate in my testimony, even after that time the U.S. exports fill part of the capacity consumption imbalance abroad. To show the importance of this, there are a number of detailed empirical studies that have been made on this and they are mentioned in detail in my report. These studies show the importance of large market technical progress, the shift of U.S. exports to new products, and that the market size tends to determine which countries begin production of a product.

Larger market countries begin production of a product on the average before smaller market countries do, and another study shows that U.S. exports are concentrated in those industries that have high R. & D. expenditures.

There are about five U.S. industries that count for all of the U.S. export surplus. The other 14 major industries actually have a net import and they show that R. & D. effort is particularly important in the sales area, again showing the importance of the market.

To show two other things, kind of confirming this: One is that a recent Manufacturing Chemists Association bulletin listed six countries and listed wage rates for those countries—the United States, Germany, United Kingdom, Japan, France, and Italy.

Now, the reason I took those six is because if I had selected six I might not prove anything or confirm any theory. What I did was take the Manufacturing Chemists Association's list and correlated gross national product against chemical exports, and I got a very high correlation between the size of the market as measured by gross national product and chemical exports.

The bigger the market, the more exports are. U.S. exports are larger than Germany's for example. To check wage rates I listed the wage rates of those countries against chemical exports and what I found was that the countries with the highest wage rates actually had the highest amount of chemical exports. There was very high correlation there.

This indicates to me that in spite of the high wages here the United States is going to continue to be a major exporter of chemicals and particularly in its new product and large volume areas.

Mr. BYRNES. I just couldn't understand why a market exists where it does, and particularly on a new product. Our market here is available to the Germans, particularly on a new product because of no competition. You don't have the ASP coming into play.

Mr. STOBAUGH. Well, one of the things is when a person introduces a new product he introduces it in the market that he knows best and