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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

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The Honorable Charles A. Vanik
Chairman, Subcommittee on Trade
Committee on Ways and Means
House of Representatives

HSE04105

Dear Mr. Chairman:

Your March 21, 1979, letter asked us to comment on a staff study by the Department of Labor's Bureau of International Labor Affairs which discusses "price behavior of products under import relief". Our comments are attached. In reviewing Labor's paper we did not attempt to verify the accuracy of the statistics used, although we do have questions about what they really mean. DLG01714

You also asked about any comparable research that we are conducting. We are not now conducting any studies that directly bear on the subject of Labor's paper.

Finally you asked us whether or not we believe interagency cooperation in clarifying the issue addressed in Labor's paper would be of assistance to Congress. Labor's so called "breathing spell" hypothesis is interesting and might very well warrant some interagency examination. For the reasons discussed in our comments, Labor has not established however even a suggestive link between import relief, innovation, and price behavior. While they hypothesized the existence of such a relationship, they failed to move convincingly beyond its mere assertion.

We will be pleased to participate in the interagency meeting to be held on June 5, 1979, to discuss Labor's paper.

As arranged with your office, copies of this report will also be available to other interested parties who request them.

Sincerely yours,

Comptroller General
of the United States

Attachment

Letter Report

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COMMENTS BY THE GENERAL ACCOUNTING OFFICE
ON LABOR DEPARTMENT STAFF STUDY:
"PRICE BEHAVIOR OF PRODUCTS UNDER IMPORT RELIEF"

The Labor paper makes two assumptions concerning price and its determiners:

1. The price of commodities granted import relief, will, in the absence of other factors, rise faster than commodities not granted relief.
2. The price of commodities produced by firms which spend resources on innovation, will, in the absence of other factors, rise at a slower rate than commodities produced by non-innovating firms.

Building on these two assumptions, the authors assert that innovation may be, in a sense, a "natural" response to import relief in the specialty steel, textile, shoe, and color television industries. As such, price effects from innovation tend to offset price effects from import relief. The combined effect of these two assumed price determiners is that prices of commodities granted relief tend to rise at a slower rate than expected (that is, when innovation is not present).

Given the validity of their assumptions, what is interesting about the paper is the authors' "breathing spell" hypothesis that import relief is a cause of innovation.

This hypothesis suggests that relief programs should be self-liquidating. The commodities of innovating firms receiving relief should, over time, become more competitive with imports thus eliminating the need for continued relief. Central to this study then should be a research design which will allow acceptance or rejection of the import relief/innovation hypothesis. Unfortunately the authors have not developed such a design.

In measuring the strength of the relief/innovation relationship it is important to control, or account for, any contingent relationship between these two variables. In other words, if a commitment to innovate is part of a government directed relief program, then the two variables ("relief" and "innovation") would not be independent of each other, and one, therefore, cannot be said to influence the other. They are, rather, "bound" together, and for research purposes should be treated as <u>one</u> variable. Indeed, in such a case, the "causal variable" would be "government" as the agent which makes innovation a condition of getting import relief.

While innovation that is contingent on, or is an integral part of a relief program may result in lower than "expected" prices (that is, relative to a selected base-line measure),

it is not useful to a hypothesis that business management independently decides to take advantage of relief by innovating.

This is in fact what the Labor paper ought really to be about: whether or not business management perceives a "breathing spell," and their possible subsequent decisions to spend or not to spend resources on innovative technology. In other words, the paper is implicitly, and ought to be explicitly, a study of economic decisionmaking. The problem is that it never comes to terms with this implicit subject matter. Perhaps the reason is, that the authors never clearly state just what hypothesis it is that they are trying to test, and what sort of research design would allow a test to be made.

The absence of this sort of explicit conceptualization has resulted in a mass of aggregate statistics which do not bear on the paper's central questions.

Those questions are:

1. Do firms granted relief increase spending on innovation?
2. If they do, are their spending decisions linked to relief in a causal fashion?
3. Are the commodity prices of these innovating firms lower than might otherwise be the case?

COMMENTS ON LABOR'S DISCUSSION OF
THE SPECIALTY STEEL INDUSTRY

The problems begin with the second sentence on page 4 where we read that "In 1976 wholesale prices (as measured by the average unit value of producer shipments) of all stainless steel items fell in average by 4.6 percent." This is, indeed, the number shown in Table 1 of the report (all references to Tables in this comment are to Tables in the report), but it is not consistent with the rates of price decrease shown for the various stainless steel products in that Table. The total figure should be a weighted average of the price changes of the componen' steel products. The necessary data for constructing the weights for 1974 through 1977 are given in Table 3. When these weights are calculated and applied to the price changes given in the first four columns of Table 1, we get an overall price decrease of 1.8 percent in 1976, not 4.6 percent. Similarly, the price increase in 1975 is 11.3 percent, not 16.2 percent.

In the last sentence on page 4 we are told that an average price increase of 4.9 percent, on eight of sixteen sampled products, for the first two quarters of 1978, represents

"good" performance. We are not told whether this is a six-month price increase or an annual rate of increase. If if is the former, the annual rate of increase is 9.8 percent, not so "good".

On page 5 we read that "only in steel rod has there been a continual decline in apparent consumption." It is not clear how this is to be reconciled with data in Table 3 which show shipments of rod increasing by 66 percent in 1976, and by an additional 32 percent in 1977.

Back on page 4 we read that "output per man-hour was significantly higher in 1976 and 1977 than it had been in earlier years * * * . These productivity increases of 12 and 14 percent" were higher than for the economy or the overall steel industry. But the data on stainless steel productivity in Table 4 show an increase in production per man-hour of 28 percent in 1976 and a decrease of 4.3 percent in 1977. The data in the same Table on alloy tool steel productivity show a decrease in production per man-hour of 1.7 percent in 1976 and an increase of 5 percent in 1977. Summing hours and production in the two kinds of steel and taking their quotient, yields a productivity increase of 26.9 percent in 1976 and a decrease of 2.3 percent in 1977. So the source of the report's reference to "productivity increases of 12 and 14 percent" in 1976 and 1977 is not evident.

More important than this discrepancy is the fact that the actual behavior of productivity in stainless steel, shown in Table 4, is readily explicable in terms of cyclical factors. During a recession, firms do not respond to declining demand by reducing man-hours in proportion. It is less costly to keep underutilized manpower on the payroll than to cut back in proportion and have to incur the high costs associated with new hires in the subsequent upswing. For this reason, productivity falls in a recession and rises, up to a point, in an upswing. But only to a point, for if demand becomes so great that it is necessary to utilize older, less efficient capital, productivity will begin to decline. The behavior of productivity in stainless steel fits this pattern exactly. In 1976, the first full year of recovery, it was possible to increase output by 51 percent with an increase in manhours of only 18 percent, due to the labor hoarding that occured during the recession. But in 1977, as demand pressed on capacity, productivity fell. The entry in Table 4 for 1974 suggests that had there been a larger increase in demand, productivity would have fallen even more steeply. This is typical cyclical behavior of productivity and there is no reason to believe that it was appreciably altered by the granting of import relief in July 1976.

Earlier, the study had described price and investment behavior, and then ascribed productivity performance to this

behavior. As concerns the relation between prices and productivity, this, of course, puts the cart before the horse. The behavior of productivity in stainless steel partly explains price behavior, not the other way around. Unit labor costs equal the quotient of average employment costs per manhour and productivity. Since, in 1976, average costs must have risen much less than the 28 percent increase in productivity, unit labor costs should have fallen appreciably, making it very easy to cut prices 1.8 (or 4.6) percent. One would have expected a larger decrease. On the other hand, one would have expected a larger price increase in 1977, as productivity fell 4.3 percent and unit labor costs rose by the sum of 4.3 percentage points and the percentage rise of employment costs per man-hour. This may demonstrate the sluggishness of prices in an administered-price industry, but the price movements are in the correct direction, if not of the expected magnitude.

The authors assert that investment spending in the specialty steel industry was at a record level in 1976. It may be reasonable to suppose that this had some effect on price and productivity behavior. But since there are long lead times in the provision of new equipment, it is impossible to believe that the granting of import relief, in July 1976, had anything to do with the record level of investment occurring that year.

COMMENTS ON LABOR'S DISCUSSION
OF THE TEXTILE INDUSTRY

The study informs us that broad import relief to the textile industry was granted late in 1971 and extended in 1974. It is asserted that, since those dates, there has been "a marked increase in productivity, while price rises have been moderate." However, using the data in Table 10, one finds that productivity increased an average of 8.8 percent between 1967 and 1971, an average of 8.4 percent between 1972 and 1977, and an average of 9.3 percent between 1975 and 1977. Thus there has been no "marked increased in productivity."

As for price increases, we learn from Table 9 that textile prices generally rose less than the Wholesale Price Index (WPI) for consumer nondurables both before and after 1971. The report's characterization of price rises as "moderate" since 1971 is a fair one, however, since the difference between the rise of the WPI for consumer non-durables and the rise of textile prices increased from an average of 0.3 percentage points in 1967-71, to an average of 3.6 percentage points in 1971-78. However, the data in Table 12 on the historical behavior of the ratio of imports to the "apparent domestic market" leads one to wonder whether the import relief had enough of an inhibiting effect on imports to enable the industry to take advantage of increased protection by raising prices, had it been so inclined. The reduction

in imports has not been very dramatic. It seems likely that (for example) wool imports of 20 percent (1975) provide as much of a constraint on increases in domestic prices as wool imports of 28 percent (1970-71). Thus one can argue that the hypothesis that protectionism causes consumer to pay higher prices, other things being equal, has not really been tested in the textile industry.

In evaluating the report's assertion that the moderate price rise in 1972 was partially accounted for by a large increase in productivity that occurred that year, it is important to ask whether the latter was connected with the import relief granted in late 1971. There was also a large increase in productivity in 1971 before the import relief was granted. Both increases are readily explicable in terms of the cyclical behavior of productivity discussed in the previous section of this comment (p. 6). 1971 and 1972 were years of rapid cyclical increases in output after three flat years, so one would have expected the large productivity increases that occurred. Since the productivity increase in 1972 was a little smaller than that of 1971, there is no reason to believe that the former was in anyway connected with the granting of import relief at the end of 1971.

COMMENTS ON LABOR'S DISCUSSION OF
THE SHOE AND COLOR TELEVISION INDUSTRIES

Since, according to the report, the import penetration ratio in the shoe indsutry was virtually unchanged in the first year of import relief, falling from .488 to .477, one should not have expected price increases associated with increased protectionism. This is a more extreme instance of the point made in discussing the data in Table 12 in connection with the textile industry. The hypothesis that protectionism causes consumers to pay higher prices, other things being equal, has simply not been tested yet in the shoe industry, and no conclusion, no matter how tentative, can be drawn.

As for the report's observation that in the first year of import relief for the color television industry, prices fell 5-7 percent while demand "increased to record levels," it is pertinent to note that if, prior to the import relief, the domestic industry had significant excess capacity, it might be able to satisfy even record levels of demand without unduly pressing on capacity. In such a case, large increases in productivity and decreases in unit labor costs should be expected, and prices could fall. While the authors of the report might argue that this is, indeed, their point, the

important question concerns what would happen if demand continued to increase, and pressed the capacity of the domestic industry. Unfortunately the data are not provided to attempt an empirical evaluation of these points.