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Administered Prices and Imports: The Steel Industry

by

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Introduction

Keeping up with the times is just as important for those providing the 'theoretical' rationale for economic policy as it is for any seller of a product in a competitive market. Economists defending the case for a more liberal commercial policy for the United States are no exception to the rule and in general have not been found wanting in their ability to convert current political or economic conditions into a schema of basic theoretical truths in support of this position. Their skill in this respect is seldom matched and indeed only topped by the inventive genius of others supporting the case for a more protectionist trade policy. Before World War II, liberal economists were essentially following a line directly traceable to Adam Smith, David Ricardo, and John Stuart Mill. The a priori case for free or freer international trade was based on arguments concerning the static gains to the nation of a more efficient distribution of national production and consumption and which incidentally had beneficial consequences for the rest of the world. These arguments, based on the comparative advantage theory, have always implicitly or explicitly assumed that all of the conditions required for a Paretian optimum welfare position were already in existence except for restrictions on international trade. The

only visible dent that marred the facade of the free trade edifice was caused by the problem of infant industries. Since this exception was based on dynamic reasoning, the more general static proposition could still be held while limiting the importance of the abnormality through appeal to the impracticability of applying the concept in a real world situation.

The legacy of World War II dominated economic conditions of most countries for many years following the conflict and thus reduced the assumption of Pareto Optimum conditions to something much less than our usual rough first approximation. Adapting to a situation in which the immediate goal of economic policy was the improving of a "second best" position was not long in coming. While never completely forgetting about comparative advantage, the freer trade economists started to base their arguments on the realities of the dollar shortage dressed up in a package labeled "trade not aid." While few economists went as far as to say that less restrictive trade policies would lower domestic taxes, many strongly argued that a receptive market in the United States for imports would speed economic recovery abroad and strengthen free world alliances with all the obvious implications for foreign aid and defense expenditures by the United States government.

The sudden reversal of the balance of payments position of the United States following the Suez crisis once again forced a reappraisal

of the weapons in the free trade arsenal. Not only had the force of the argument of helping other countries lost its appeal^{*}, but the

* This is true for the developed countries, but the argument still holds some force for underdeveloped countries.

alteration of the economic situation clearly gave ammunition to protectionists to prove the reverse of the argument. They have argued that we have gone too far in opening our market to foreign goods and the righting of the balance of payments requires greater restrictions on imports. The anti-protectionists have countered this attack by asserting that the proper way to achieve equilibrium in our balance of payments is to increase our exports. This can best be furthered by the elimination of discrimination against United States goods by other countries particularly in Europe and Japan which is stimulated by the continuance of a liberal commercial policy in the United States. While this approach may be sufficient to offset the protectionist advantage, the need for a new liberal tack became obvious.

Another weapon was found by looking again at the effects of international trade on the domestic economy. The existence of price inflation since the war during prosperous and recessionary periods alike has focussed attention on the many inflexibilities of the American economy and particularly upon the monopolistic powers of business and labor

unions leading to the cost push phenomenon. It is argued that international trade provides real competition to domestic industries which in its absence would be without any effective source of competition. The specter is often raised of unions and management coming together in industries producing products for which the final demands are very inelastic and conspiring to force up money wages and prices to the detriment of the general public*. It is argued that if these industries were forced to

* Such arguments are generally substantiated through illustrations drawn from the steel industry. The special attention given the steel industry in this context makes it a natural subject for quantitative research.

compete with imports which are outside their control, very strict limits would be put on their price raising abilities even if the domestic ownership of production is highly concentrated in a few firms. Raising domestic prices above import prices could only lead to reduced output and profits and unemployed workers. The discipline of foreign competition is supposedly sufficient to ensure conditions of effective price competition. Thus Haberler states when listing the dynamic benefits of trade that, "Free international trade is the best antimonopoly policy and the best guarantee for the maintenance of a healthy degree of free competition." [8] Raymond Vernon making a similar point argues that monopolistic control has reached such a point in some industries that competitive pricing, cost-cutting and product development can only be achieved

by extreme foreign competition. [24] This proposition has very special appeal since a competitive pricing policy if forced upon American producers would stem the tendency for United States goods to be priced out of world markets which is considered a contributing factor to our balance of payments difficulties. This leads to the rather paradoxical policy recommendation that the way to improve our balance of trade would be to stimulate competitive imports.

The belief in the therapeutic effects of foreign competition is rather widespread. While finding the government and labor union power as the villains in the piece, the National Association of Manufacturers state, "In principle free competition from abroad can have the same beneficial economic effects as competition within our own borders." [12] This is a rather remarkable stand in view of past pronouncements of conservative business leaders whose love for free and unrestricted enterprise seemed to be bound by the Atlantic and Pacific Oceans^{**}. Nor has this belief been without its effect on public

* This is not true of 'conservative' economists who have always been the most stalwart champions of free trade.

policy. Faced with the problem of growing labor demands for higher wages and with the unmistakable signs of forthcoming price increases by heavy industry, the French Government on March 23, 1961 announced

the intention of reducing the French tariff ahead of the Common Market schedule in order to exert pressure on the domestic price of industrial goods [9]. Thus foreign competition was called upon to perform the function previously assigned to direct wage and price controls.

Implications of the Argument

In order to explore some of the implications of the import discipline argument, a particular set of market structure conditions will be assumed and the effect of international trade examined. Suppose we are dealing with an industry producing an identical product "i". There are only a few firms, one of which has a dominant market position and is the recognized price leader. Prices are quoted F.O.B. the mill and short run shifts in demand are generally met by output changes at constant prices. The resulting industry supply curve of the domestic industry will be perfectly elastic to the point of full capacity and then turn almost completely inelastic (curve ss, figure 1a). The domestic demand for product i (dd) is quite inelastic for most price ranges, but becomes substantially more elastic at a very high price. In the absence of international trade, the price P_u will rule in the market and a quantity Oa will be produced and consumed at home.

Figure 1b represents the market conditions for product i in the rest of the world. The rest of the world is treated as if it were a single entity with the characteristics of demand and supply exactly

Fig. 1b P

Rest of World

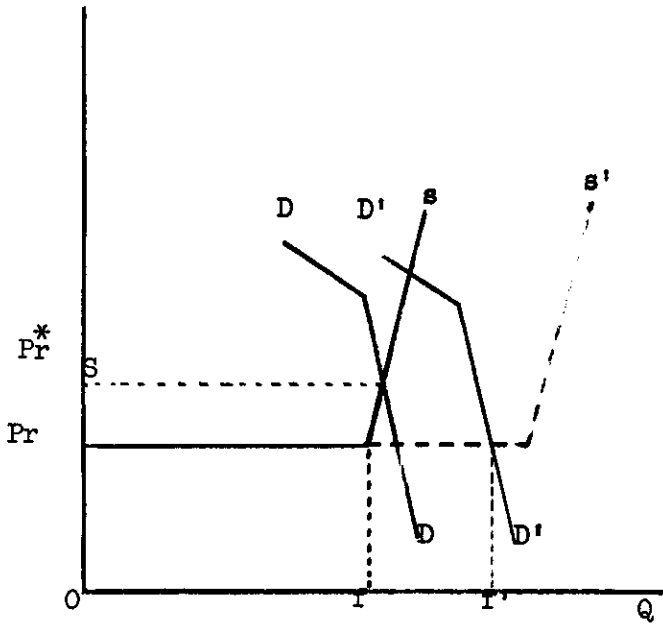


Fig. 1a P

U. S.

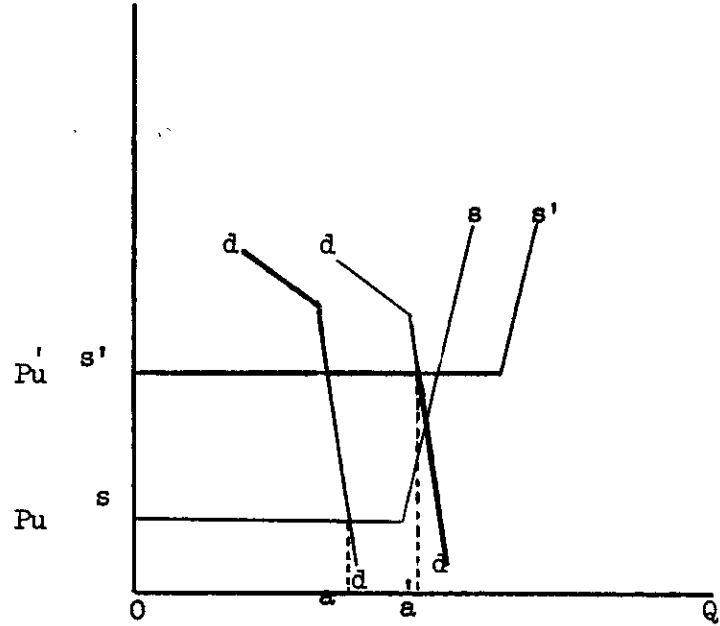


Fig. 2

Rest of World

U. S.

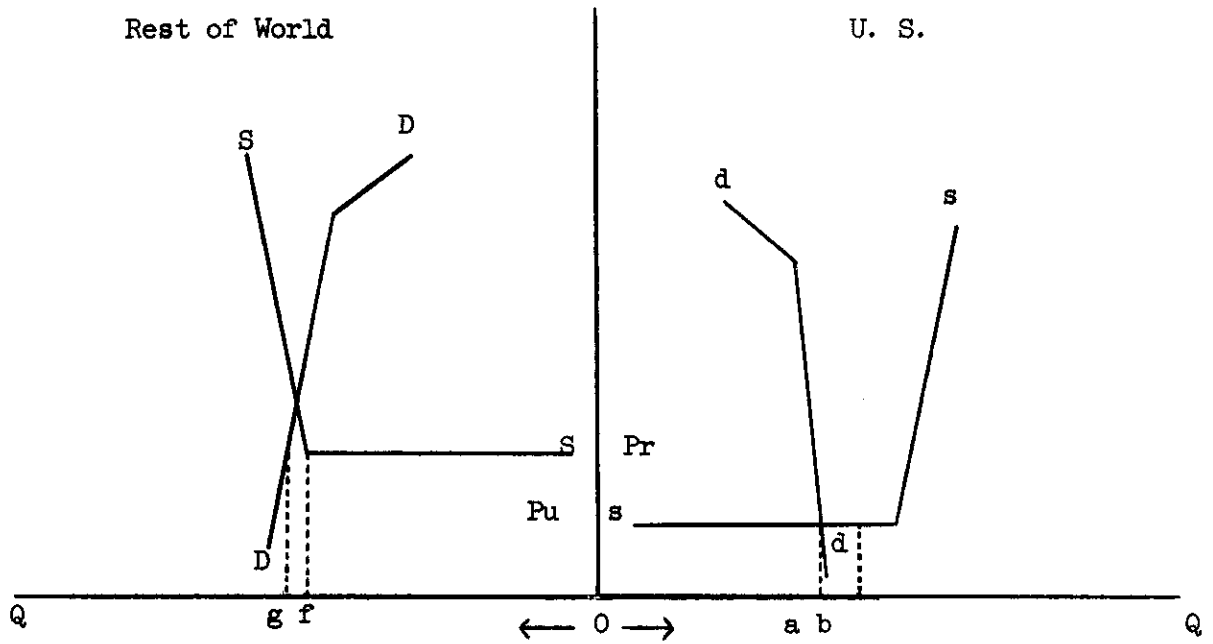
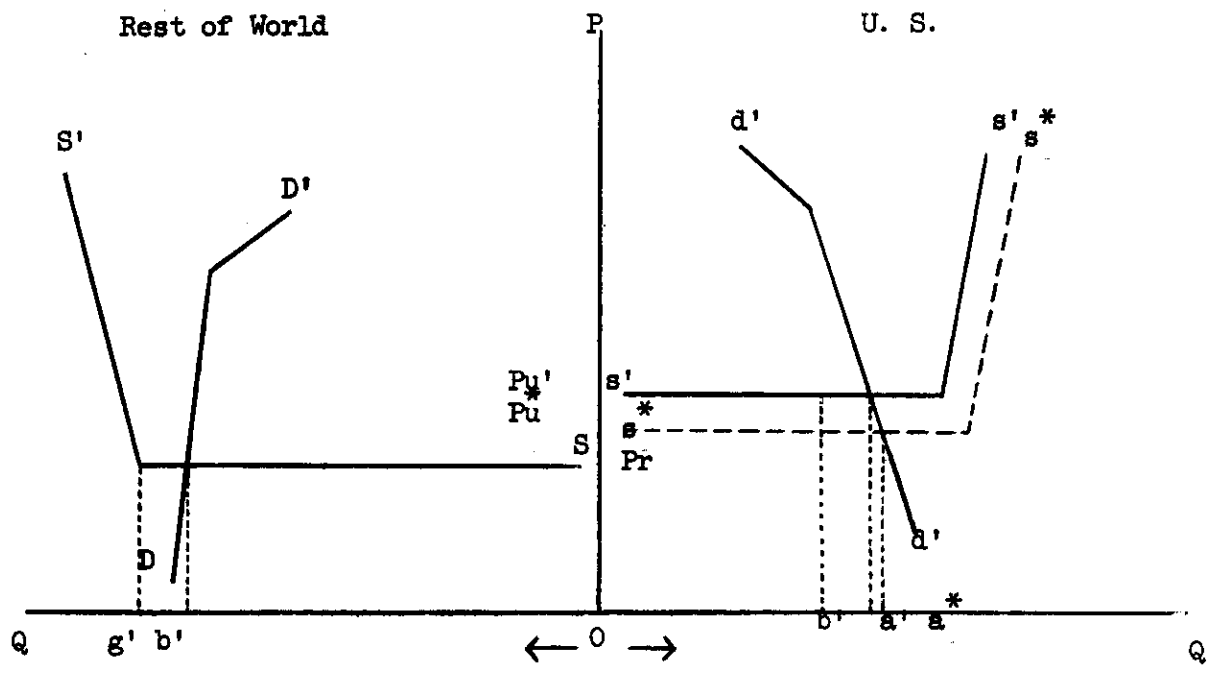


Fig. 3



parallel to the industry conditions in the United States except for an apparent shortage of capacity. The price P_r^* would clear the market omitting trade with the United States although it is very likely that a ceiling price P_r equal to the horizontal part of the supply curve will be imposed by government or the industry itself and this will be assumed to be the case. The allocation of output would be accomplished through a formal or informal rationing scheme. In order to illustrate the effects of international trade, the traditional method of picturing both sets of demand and supply curves on the same diagram (figure 2) is employed with the quantities increasing from left to right on the horizontal axis for the United States and from right to left from the common origin for the rest of the world. An amount ab (equal to fg) would be exported from the United States to the rest of the world. The difference in the market price P_u in the United States and the price in the rest of the world P_r would be absorbed by foreign tariffs, transportation costs, and middlemen profits. The middlemen may be specialized traders who arbitrage between buyers and sellers, or the service could be performed by the buyers or sellers themselves.

Now we postulate that with the passage of time, the competitive position of the United States in product i has deteriorated and the comparative advantage has shifted to the rest of the world. The demand curves in both areas have shifted to the right (figures 1a and 1b) in parallel fashion. In the rest of the world, net investment in the in-

dustry has substantially increased capacity, however, factor price increases have been limited to productivity gains so that the new supply curve SS' is merely a horizontal extension of the old supply curve SS . Excluding trade with the United States, the market price remains at Pr and the quantity Of' would be produced leaving some excess capacity in the industry. Supply conditions in the United States, however, are substantially different. While net investment has also increased capacity in sufficient amounts to satisfy domestic needs, factor prices have increased in excess of productivity gains causing an upward shift of the whole supply curve to $s's'$. In a closed economy situation, a higher domestic price Pu' would prevail with the quantity Oa' being produced and sold.

Removing the closed economy restraint with the comparative advantage situated in the rest of the world. ($Pu' > Pr$), yields a situation as illustrated in figure 3. The relation of imports to the market structure as assumed for the United States is equivalent to the entry of a new firm into the industry. If this was indeed a new domestic firm and its capacity was small in relation to the price leader, every motivation would be present for it to follow the existing price leadership. The only change resulting would be that the established firms would give up some of their output to make room for the new entry. If the new firm was so large as to take a commanding position within the market, it would assume leadership within the industry and set prices for all

firms. The analogy between imports and a new firm is not quite complete in that even if the export capacity of foreign producers is not large in relation to the United States market, foreigners are not able to follow the existing price leadership because of their revealed prices established for domestic sales. The rest of the world would export a quantity $f'g'$ of i to the United States (equal to $a'b'$) allowing foreign producers to operate at full capacity while generating more slack in the American industry. The domestic price of i in the United States would be unaffected remaining at P_u with the margin between it and the import price P_r being absorbed by American tariffs, transport costs and middlemen profits.

In the event that foreign producers had a great deal of export capacity such that foreign competition was a substantial threat to the American industry, then the import price would become the price leader. This would appear as a downward shift in the domestic supply curve of United States producers to s^*s^* (figure 3). The market price of i would drop to P_r^* reducing the price differential $(P_u^* - P_r)$ to just the American tariff and transport costs. After the adjustment was made, presumably the foreign export capacity would have to be demonstrated before the American industry would react, imports would cease and the domestic industry would produce and sell the quantity Oa^* . The total effect of the import competition would be the reduction of domestic prices and a slight increase in output depending upon the elasticity of

the domestic demand curve.

The import discipline argument, therefore, appears to be based on the assumption that the import price will become the price leader. If the country involved was the Netherlands, there would be little question as to the reasonableness of the assumption. The economic size of the Netherlands is small in relation to world productive capacities and if a Dutch industry became uncompetitive with respect to foreign sources of supply, it is clear that a substantial portion of the domestic market would be lost to imports. For Dutch producers, meeting foreign competition is a matter of survival. When one turns to consider the United States, however, the situation is radically different. Not only are actual imports for most products quite small in relation to total United States consumption, but potential imports are often severely bound at any point in time by capacity constraints. This does not suggest that a loss of as little as 5% of the market wouldn't be missed by domestic producers since its effect on profits may be greatly multiplied, but the loss of profits may well be less than would result if the import price was allowed to become the price leader. There is some point in the growth of imports, however, when the domestic firms will meet the import price rather than give up more of the market. This point will differ from product to product depending on marginal cost conditions and the elasticities of demand.

Application to the Steel Industry

Public attention in the form of official pronouncements, congressional investigations and the like have been focused on the pricing policies of a number of American industries. Ethical drugs, heavy electrical machinery, dairy products and others have all faced the scrutiny of open hearings by the Senate Antitrust and Monopoly Subcommittee, however, the steel industry is without equal in its ability to command prime attention of that body. Many separate sets of hearings have been held on the occasion of steel price increases since 1948. The remarkable amount of public interest and concern is traceable to the extent of the inflation in steel prices that has occurred and its effects on the whole economy. According to the Bureau of Labor Statistics, the wholesale price index for iron and steel products increased by 88% from 1947 to 1958 while the wholesale index for all commodities (other than farm and food) increased by only 32% during that period. Steel product prices have been cited as being particularly strategic in the post war inflation because steel is an input in so many products and inflationary wage bargains determined in the steel industry appear to have served as a pattern for other industries [7].

The actual process of price formation in the steel industry has been studied by a number of people but without a general consensus of opinion resulting.*

* In addition to the authors specifically cited references [1,4,5,14,15,23] are also devoted in part to the subject.

The characteristics of the steel industry are well known and approximate the assumptions of the oligopolistic industry discussed above except that the industry produces a number of generally distinct products rather than one. Robert Lanzillotti [10,20] came to the conclusion that there is in fact price leadership in the steel industry and in general, prices are set by the leader so as to yield a target rate of return on investment (stock-holders investment plus long-term debt). This return does not maximize profit but is one that is fair as determined by a process called 'public utility like thinking' and tempered by the need to face the competition of substitute metals, limit the pressure from Congressional Committees and avoid antitrust actions. Furthermore the structure of the prices of individual steel products is influenced by the cost conditions peculiar to the product and the company's leadership position with respect to the rest of the industry. What results from this kind of price leadership is short run stability in steel prices plus a few discrete shifts in the level of prices reflecting cumulated cost changes.

The process of price setting is viewed somewhat differently by Adelman [2]. He sees the steel industry actually seeking to maximize profits with a group monopoly price but it is faced with conditions of uncertainty about the demand curve. As a result the price level has been raised in rather small discrete steps in an effort to search out the discontinuity in the demand curve indicating the end of the inelastic portion which would correspond to profit maximization (figure 1a). The discrete jumps in price are frequently correlated in time with wage rate adjustments to limit public

censure, but are not in fact a direct result of them. This process also means that there will be short run stability in prices.

A much different view is held by Martin Bailey [2]. While recognizing the short run stability of the list price of steel products (used by the BLS for their index), he contends that actual prices paid by steel consumers do fluctuate and reflect competitive factors in the industry. The form of a price decline is much different from products sold in a normally considered competitive industry, however, they are just as real. At times of weak demand, steel companies will absorb all or part of the freight charges, not charge for some extras, and give substantial quantity discounts. As demand strengthens, these hidden price concessions are rescinded leading to flexible prices in both an upward and downward direction. If this is in fact of real importance in the steel industry, then changes in foreign competition would be reflected in actual steel prices if not in list prices.

The position of the American steel industry in international trade has changed quite noticeably over time. Immediately after World War II, because of either the competitive level of U. S. steel prices or the lack of capacity in other countries or both, the American steel industry exported a great deal more steel tonnage than we imported.* Steel was imported to some

* International trade played such a small role in the prewar steel picture that it wasn't even considered as a possible area for fruitful research [13].

extent during periods of crises such as the early years of the Korean war or during steel strikes, but these inroads into the American market were short lived. Around 1954 - 55 an upward trend to steel imports and a downward trend to exports appears. The pattern of the aggregate, however, is not reflected proportionally in all of the separate products. While foreign barbed wire and concrete reinforcing rods provide an important part of domestic consumption, American cold rolled steel for instance is exported in possibly even growing volume to Europe.

Nature of the Test

The fact that there is heterogeneity among steel products with respect to foreign trade makes it possible to use the experience of this industry in making a weak test of the import discipline hypothesis. Since some steel products are facing increasing competition from foreign sources while others are not, this difference should reflect itself in differential price changes of the products if the hypothesis is applicable. Ideally one would like to specify the entire price determining equation including growth in product demand and capacity and measure the importance of the foreign trade variables in the overall explanation. This unfortunately is not possible since such an equation is not known and beyond the scope of this paper. By looking at the relationship between steel prices and the foreign trade variables alone one can get a rough approximation of whether these independent variables are likely to be of some importance in a completely specified model. If they did appear important, this would

give enough encouragement to pursue the research further even though it may well occur that adding other variables would substantially lessen the explanatory power of the previously included ones. On the other hand, if in the simple form, the foreign trade variables did not provide much explanatory power, it is highly unlikely that they would appear to have greater power after additional variables have been added.*

* This would require a compensating relationship among the independent variables themselves that wouldn't make sense in this economic application.

The change in the price of steel product i between time t_0 and t_1 is considered as a linear function of the change in the import price of product i (including tariffs) over that period and a measure of the quantity of imports of i in year t_1 as follows:

$$P_{ui}^1/P_{ui}^0 = A + B_1 (P_{ri}^1/P_{ri}^0) + B_2 v_{ri}^1 + z$$

Where P_{ui}^0 is the price of product i produced in the United States in period 0 .

P_{ri}^0 is the price of product i from the rest of the world including U. S. import tariffs in period 0 .

v_{ri}^1 is the volume of imports into the U. S. of product i in year 1 .

Other measures of import quantity include V_{ri}^1 , the value of imports of product i into the United States in year 1 .

v_{ri}^1/v_{ui}^1 where v_{ui}^1 is the volume of domestic production of i in year 1 .

V_{ri}^1/V_{ui}^1 where V_{ui}^1 is the value of domestic production of i in year 1 .

and

z is a random variable

If the import discipline argument is valid, then the change in the domestic price of goods i should be positively related to the change in the import price of i and negatively related to the variable measuring the quantity of imports.

Sources of Data

The period chosen for study was 1954 to 1958. These two end years are appropriate in that they are free of major crises, represent roughly the same phase of the U. S. business cycle, and the required data are available.

The observations are cross sections of steel products in these two years. Data concerning the domestic price of steel products are available from two sources, neither of which is perfectly satisfactory. The Bureau of Labor Statistics report wholesale prices of many steel products [19] but these are taken from list prices given out by the industry and are subject to the major criticisms indicated by Bailey. Since 1954 and 1958 are both years when censuses of manufacturing were taken, data as to quantity and value of shipments of many steel products are reported and thus unit value prices can be calculated [16]. These data have the desirable properties of coming from the same source as the quantity data and yield more observations than BLS, but are subject to the criticism of being too broad in classification. Despite this reservation, the unit values were used yielding 46 observations.* The products fall into three major

* The products are listed in the appendix. All questions of definitions were settled by use of [6].

groups, carbon steel products, wire and wire products and alloy steel products.

The import prices employed are also the result of unit value calculations taken from data reported in the annual import statistics [18]. These figures were adjusted to reflect the American tariff [17]. The import quantity statistics were taken from the same source [18] and when expressed as a ratio to the domestic counterpart, the census

reports provided the denominators [16]. Data were also recorded as to the concentration ratio of the ownership of producing capacity in each product in the U. S. but this was available only for carbon steel products [3]. The units of the variables involved are as follows: the price ratios are percentage figures, volume of imports are tens of millions of pounds, value of imports are millions of dollars, the volume and value relatives are hundredths of a percent.

Results of the Calculations

The linear equation relating the change in the price of steel products from 1954 to 1958 to various international trade variables was estimated in a number of different forms. Table 1 lists the results of the calculations using the observations of all the separate steel products together with the different measures of quantity of imports. A very superficial glance at the results is sufficient to convince one that a very small part of the change in domestic price is being explained. When one looks at the "F" test to determine the reliability of the estimated equation, this impression is substantially reinforced. Not only are the "F" values below the .99 or .95 reliability level of the distribution, they are also below the .05 level and three of the four are below the .005 level.* One can interpret this to mean

* The lower portion of the "F" distribution is obtained by taking the inverse of the corresponding point of the upper portion [11].

Table 1

Regression of Changes in the Domestic Price of All Steel Products (1954-58) on Changes in the Import Price and the Level of Import Quantity 1958.*

Constant	Import Price Ratio Pr^1/Pr^0	Volume of Imports vr^1	Values of Imports Vr^1	Volume Relative (vr^1/vu^1)	Value Relative (Vr^1Vu^1)	R^2, n
1.1961 (.0742)	.0322 (.0628)	.0041 (.0097)				1.0 n = 46
1.1998 (.0742)	.0312 (.0629)		.0013 (.0183)			0.6 n = 46
1.2001 (.0738)	.0309 (.0630)			.0040 (.0472)		0.6 n = 46
1.2005 (.0738)	.0314 (.0631)				-.0005 (.0141)	0.6 n = 46

* Figures in parenthesis indicate standard errors.

Table 2

Subgroup Calculations of Changes in Domestic Steel Prices on Changes in the Import Price and the Level of Import Quantity.*

Subgroup	Constant	Import Price Ratio (Pr^1/Pr^0)	Volume of Imports vu^1	R^2, n
Carbon Steel	1.2901 (.0889)	-.0551 (.0754)	.0090 (.0068)	13.5 n = 19
Wire and Wire Products	.9528 (.1935)	.2140 (.1809)	.0571 (.0627)	24.7 n = 14
Alloy Steel	1.2223 (.1405)	.0347 (.1129)	-.0538 (.0432)	11.1 n = 13

* Figures in parenthesis indicate standard errors.

that if you correlate truly random variables with the same degrees of freedom in the numerator and denominator, you would get an "F" value this low only five times in one hundred times (5 in a 1000 for three cases). As to the estimates of the parameters of the equation, very little needs to be said. In each case the only coefficient that appears reliable is the constant term. The import price coefficients have the expected sign while the quantity of import variables do not, but again this is no better than one would expect by chance.

In an effort to improve the explanation of price changes, the data were stratified into the three major classifications of steel products. This held some hope of success in that it is well known that the market for wire products differs substantially from carbon steel. The results of these calculations are shown in Table 2 using volume of imports as the quantity variable. In addition Table 3 gives the explained variance ratios for the calculations using the other measures of import quantity. While there is in fact a great deal of improvement as the percentage of variance explained reaches 25%, the estimates are still unreliable as measured by the "F" test. This is in part due to the fact that after stratification, the number of observations in each group is rather small. There is also some encouragement to be gained by the fact that the wire products group gave the best estimates. On the other hand, the only calculation yielding exactly the expected signs of the coefficients was the alloy group, the least reliable estimate.

Table 3

Explained Variances of Subgroup Regressions Using Various Import Quantity Measures

Subgroup	Import Volume vr^1	Import Value Vr^1	Import Volume Relative vr^1/vu^1	Import Value Relative Vr^1/Vu^1	n
Carbon Steel	13.5	15.1	12.0	12.9	19
Wire Products	24.7	18.5	19.4	18.6	14
Alloy Steel	11.1	14.7	1.2	1.5	13

Table 4

Regression of Changes in Domestic Price of Carbon Steel Products Using Various Independent Variables Including the Concentration Ratio*

Constant	Import Price (Pr^1/Pr^0)	Import Volume (vr^1)	Import Value (Vr^1)	Concentration Ratio (c)	R^2 , n
1.2669 (.1054)	-.0628 (.0793)	.0089 (.0070)		.0044 (.0101)	14.6 n = 19
1.2637 (.1044)	-.0658 (.0782)		.0195 (.0138)	.0050 (.0100)	16.5 n = 19
1.2213 (.0744)				.0026 (.0100)	0.4 n = 19

* Figures in parenthesis indicate standard errors.

One other effort was made to increase the amount of explained variance. As was mentioned previously, Lanzillotti suggests that the pricing of individual steel products is influenced by the degree of concentration of ownership of the producing capacity of the product. In order to utilize this suggestion, the variable c was introduced and defined as the percentage of total industry capacity owned by the four largest producers. This variable was added to the calculation of the carbon steel group and the results are shown in Table 4. Unfortunately the concentration ratio also does not appear to be a very significant determinant of steel product prices. The amount of explained variance was increased but no more than would have been expected by adding a random variable. When the concentration ratio was tried alone, without any foreign trade variables, the results were very much the same.

Conclusions

The import discipline hypothesis could be a very powerful argument for freer trade. It could also provide the government with a policy instrument to deal with cost push inflations. The government might lower tariffs to increase foreign competition on the products of industries that raised prices despite the government's admonitions. This would be proper policy if the domestic industry did react to the increase in foreign competition by lowering its prices or even moderating the increases. From the evidence examined here with respect to the steel industry, this competitive type response has been singularly absent. Even if one accepted these results as conclusive for steel, this does not prevent the hypothesis from being valid for other industries. There is in fact circumstantial evidence to indicate that imports were important in undermining the effectiveness of the heavy electric generator cartel leading eventually to lower prices. However one must use this argument with caution for the very market conditions that presented the need for outside sources of competition may prevent a flexible price response.

One can find technical reasons to help explain the inability of the statistical results to validate the import discipline hypothesis for the steel industry. The technique employed was intended to provide only a first approximation, however, the results of the calculations give the rather clear impression that the domestic steel industry is quite indifferent to imports, at least as far as pricing policy is concerned. Certainly the explanation for this result in part lies in the fact that imports are simply too

small to become the price leader in our market as the theoretical discussion indicates could be the case.

There are also institutional factors in the steel industry that add credence to the apparent indifference of the industry to the inroads of imports. Steel products are sold both by fully integrated and non-integrated firms. A non-integrated firm frequently finds itself in competition with a fully integrated firm in the sale of final steel products, but dependent on that same firm for an important part of the materials going into its production process. Suppose a great deal of foreign barbed wire were offered to the American market at a price below the ruling market price. The integrated firm might well have enough profit margin and have the desire to meet the foreign price, but if they lowered the price of barbed wire and not the price of wire rod, the non-integrated firm would be put into a substantial profit squeeze. Since the integrated firm not only sells barbed wire, but also wire rod to be made into barbed wire, it is in a position to drive non-integrated firms out of business if they desire (or force them to integrate). The Justice Department is known to take a dim view of this type of profit squeeze on non-integrated firms. Yet it may well be that it does not pay the integrated firm to lower its price on wire rod which is used for other products besides barbed wire even though it was prepared to meet the foreign price on the final product. The end result may be that all domestic prices are held at the same level and the imports allowed to enter the market

rather than face governmental displeasure.* This is another instance of

* An analogous situation occurred in 1948 when the prices of intermediate products were raised more than final products [22].

our antitrust laws acting in a way to protect competitors rather than competition.

It is possibly quite likely that if foreign trade began to play a larger role in the United States and our economy became an integrated part of the world market, the import discipline hypothesis would be valid for most industries. No industry can long stand a continued erosion of its market without responding to the competition in like manner or preparing to go out of business. The competitive response would surely be speeded and made more certain if it was clear that the government would not bail out the industry in case of serious trouble through restrictive trade policies. On the other hand under present circumstances, it would be prudent to insure that the industry is capable of a competitive response for if it is not the case, foreign competition will not discipline the industry but merely punish it.

APPENDIX

Carbon Steel Products

Steel Ingot	Steel Sheet, Hot Rolled
Skelp	Steel Sheet, Cold Finished
Wire Rods	Galvanized Steel Sheet
Steel Concrete Bars	Steel Plate
Steel Bars, Hot Rolled	Tin Plate
Steel Bars, Cold Finished	Terne Plate
Steel Strip, Hot Rolled	Steel Structural Shapes
Steel Strip, Cold Finished	Steel Pipes and Tubes
Steel Strip, H.R., Galvanized	Steel Rails

Steel Rail Braces and Bars

Wire Products

Wire Nails	Steel Cut Tacks
Wire Tacks and Staples	Steel Cut Nails, Spikes, and Brads
Barbed Wire	Paper Machine Wire Cloth
Woven Wire Fencing, Galvanized	Wire Mesh
Bailing Wire	Wire Strand
Steel Wire	Wire Rope and Cable
Galvanized Steel Wire	Industrial Wire Cloth

APPENDIX

Alloy Products

Galvanized Steel Wire Alloy

Steel Wire Alloy

Steel Ingot Alloy

Wire Rods Alloy

Steel Bars, H.R., Alloy

Steel Bars, C.R., Alloy

Steel Strip, H.R., Alloy

Steel Strip, C.F., Alloy

Steel Sheets, H.R., Alloy

Steel Sheets, C.F., Alloy

Steel Plate, Alloy

Steel Pipes and Tubes, Alloy

Steel Structural Shapes, Alloy

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