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An Economic Analysis of the Possible Implications of the Abolition of the Basing Point System of Pricing on the Steel Industry in Utah

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AN ECONOMIC ANALYSIS OF THE POSSIBLE IMPLICATIONS OF THE ABOLITION OF THE BASING POINT SYSTEM OF PRICING ON THE STEEL INDUSTRY IN UTAH

by

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in

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INTRODUCTION

The production of iron in America began in a limited area east of the Alleghenies, centered around Philadelphia, which was also a principal port of entry for foreign iron. As early as 1750, pricing was done on a rudimentary basing point structure. Apparently, all prices on domestic iron were quoted on a Philadelphia base and were higher in the outlying territory where the iron was actually made. The manufacturers absorbed freight in order to move their iron to the central market, where it competed with foreign iron.¹

With the tremendous growth of iron and steel capacity at Pittsburgh, Philadelphia did not keep its position as a base, and by the middle of the 1880's, three steel plants in New Jersey and Eastern Pennsylvania began quoting prices from the Carnegie Plant in Pittsburgh. This marks the real beginning of the basing point system of pricing in the United States.² This pricing method slowly extended to other steel products and producers through the medium of various pools, trade agreements, and trade associations. By the early 1900's, the basing point system was in general use

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1. The Basing Point Problem, Temporary National Economic Committee Monograph 42, (Washington, 1941), p. 41
in the steel industry under the leadership of the United States Steel Corporation. Thus, the first industry-wide use of delivered pricing occurred in the steel industry under the old "Pittsburgh-plus system."

Shortly after industry-wide use of delivered pricing had been achieved in the steel industry, the Portland Cement Industry adopted a very similar pricing formula. This was probably because the United States Steel Corporation had become the largest single producer of Portland Cement in this country. Unlike the steel industry, however, the cement industry adopted a multiple basing point system and became the first industry in America to use more than one basing point.

After the adoption of delivered pricing by the producers of Portland Cement, the use of basing points spread quite rapidly to other industries. Little information regarding the spread of delivered pricing is available, but at least twenty industries have used the system.

Legal action against the basing point system began in 1920, when Western steel consumers protested to the Federal Trade Commission that steel prices were too high and were being fixed by collusive practices. Since that time, court

2. Ibid., p. 17.
3. Ibid.
4. Ibid. See also for a list of industries which are now using, or have used, the basing point system.
5. Ibid., p. 66.
action on this issue has been almost continuous. Finally, on April 26, 1948, the Supreme Court handed down a decision in a case against the use of delivered pricing by the producers of Portland Cement.\(^1\) This case, it is thought by many, will have the effect of making the use of basing points in any industry illegal. More recently, in the spring of 1949, the Supreme Court handed down a decision against the use of delivered pricing by the makers of rigid steel conduit.\(^2\) This case has had the effect of strengthening the belief that ultimately basing point pricing itself will be declared illegal if it can be proven the result of conspiracy.\(^3\)

At the present time, the Congress of the United States is considering various proposals for clarifying the status of the basing point system. As yet, nothing conclusive has been decided.

While it is still uncertain what the exact legal status of basing point pricing will be, some industries, including the steel industry, have abandoned the basing point system and are now pricing on an entirely different basis.

**SCOPE OF THIS STUDY**

This study will be confined to a discussion of the possible implications of the abandonment of the basing point

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2. Federal Trade Commission v. Triangle Conduit and Cable, Inc. et. al. 7th Circuit Court of Appeals, 168 Fed. 2d 175 (1948). The high court decision is recorded in 1949 and is not yet available.
system of pricing by the steel industry in Utah. For purposes of comparison, a rather detailed discussion of the basing point system will be included, and to clarify the present legal status of delivered pricing, some court history will be summarized. Without doubt, a new pricing policy in the steel industry will have some rather far reaching effects, both on other industries and upon the economy of this region. These possible effects will be discussed.

PURPOSE OF THE STUDY

The abandonment of the basing point system of pricing by the steel industry creates many problems as to the adjustments which will be necessary under the new pricing system. It will be the aim of this study to ascertain the possible nature and extent of these adjustments, and their effect, both upon the Utah steel industry and upon the economy of this area. Since the abandonment of basing point pricing is a rather recent development, this thesis, of necessity, will be in the nature of a prediction as to some of the possible economic implications of this action.

METHOD OF ANALYSIS

Not enough time has elapsed since the steel industry abandoned the basing point system to make any important decisions on the basis of an empirical study. For this reason, the method of this study must be confined to a determination of the possible implications through the use of economic analysis. Although much has been written about
the possible effects and attendant adjustments since the abolition of delivered pricing became a possibility, little or nothing has been said about what might be the effects on a particular industry, and the consequent effects on the economy of a particular area. For this reason, the use of existing material will be confined to those statements which can be applied to this particular study.
THE BASING POINT SYSTEM

BACKGROUND

There are certain common characteristics among the industries which have adopted a system of delivered pricing. No attempt will be made at this time to say which of these characteristics are causes and which effects of the basing point system. Such a discussion can be more profitably undertaken later in this paper.

First, in nearly every industry, freight costs are an important element of the delivered price. It is necessary that this be the case for any commodity where the price is quoted on a delivered basis. If freight costs were trivial, the buyers would not be very concerned about the point of purchase, and any scheme to equalize freight costs would be superfluous.

Second, the industries are usually characterized by a high degree of geographic concentration of production and a limited number of producers. This characteristic is most easily seen in the steel industry. Here, productive capacity is located at the source of one of the raw materials rather than at the principal market outlets. The effect of this type of locational pattern is to create areas where much more

1. The term "delivered pricing" will be used interchangeably with "basing point pricing", throughout this paper. Actually "delivered pricing" is a broader term and includes zoning and national uniform sales price schemes as well as the basing point method. Most writers on the basing point system, however, use the term as a synonym to basing point pricing.
3. Ibid., p. 116.
of the product is produced than can be consumed in the market immediately surrounding the production point. The basing point method allows the highly concentrated production centers to meet prevailing prices in more distant market areas.¹

Third, the total demand for the product is usually comparatively inelastic from a price standpoint, while the market is such that the potential demand for the individual producer's product is highly elastic.² This means that in the absence of control, the market might very well be comparatively competitive were it not for freight differences, which in some cases may be effective barriers to widespread competition.

Fourth, the industries have comparatively high fixed costs.³ This means that there is constant pressure on the individual to expand his own output. Also studies in the steel industry have shown that variable costs remain constant over a rather wide range of output.⁴ This means that the average cost per unit declines until a large output level has been reached. Thus, the individual producer is always striving for enough market outlets to allow him to produce near capacity. The basing point system allows the individual producer to expand sales on a geographic basis without upsetting the price structure of the local market.

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2. Ibid., p. 16.
3. Ibid., p. 22.
4. Ibid. Also, Price Discrimination in Steel, T.N.E.C. Monograph 41, p. 31.
Finally, use of the basing point system requires some organization within the industry using it. This gives rise to the last characteristic of industries using this pricing method, i.e., concentration of power within the industry either through the medium of dominating firms, trade associations, or price leadership. It has been argued that industries using the basing point system are of the type which would ordinarily have an administered price in any case.¹

OPERATION

Indispensable to the operation of any delivered pricing system, is publication of the various base prices by the previously designated basing points. In the steel industry, this was done by the Iron and Steel Institute. Equipped with this information, the individual producer finds it relatively simple to compute the delivered price to any possible destination. In order to facilitate computation of delivered prices, a rate book is usually published in conjunction with the base prices. These rates may or may not coincide with the actual freight rates. When railroad freight rates change, the old rate book is usually used until such time as a new one can be computed.² Although the system is extremely easy to use, it is very precise, and in at least one case, it has been shown that prices submitted by cement producers on a government order were precisely the same to five decimal places.³

¹ Fortune, xxxix (1949), p. 211.
² Machlup, op. cit., pp. 20-1.
³ Ibid., p. 2.
Keeping the participants in line is a comparatively simple procedure. If one of the producers quotes a price which is not in line with the price which would result from use of the pricing formula, the other members can retaliate by making this producer's mill an involuntary basing point with a very low base price. This means that sales in this producer's area will be made on the basis of a base price which may not even cover costs. The other members can divide the business in this area in such a way as to suffer only very slightly from the artificially low price. After a short period of this, the recalcitrant producer usually conforms. This practice is known to have been successfully used in at least one instance.¹ It should be pointed out, however, that resort to action of this sort is very rare since as a rule members of the system conform because it is to their advantage to do so. This simplicity in operation of the basing point system should not be confused with the vastly more complicated results. The basing point system has been called the "...most intricately confusing phenomenon of modern capitalism."²

MECHANICS

In order to determine what some of the possible implications of the abolition of the basing point system might be, it is first necessary to define precisely what the system is,

² Fortune, xxxix (1949), p. 211.
and what some of its effects have been. It is for this purpose that the following discussion is included.

The single basing point system was the first to be used in this country and is the simplest type of delivered pricing scheme. This system exists when the sellers of a particular product figure freight charges on their product from one particular mill or city. Thus, for example, if there are several widely scattered mills producing identical or nearly identical products and all the mills charge freight on their shipments as if all shipments had originated at one certain mill among them, this constitutes pricing by the single base method. The single base method is important only from the standpoint of historical development. It was the first step in the evolution of the modern basing point systems.¹

The multiple basing point system is the type most widely used in recent years.² This method of delivered pricing is not so simple or readily understandable as the single base method. It exists where the sellers of a particular product figure freight charges on their sales from a group of previously designated mills or cities. The multiple-base system differs from the single base system only as regards the number of points designated as bases or basing points. The rule under multiple basing point pricing is that of the various combinations between base prices and freight costs, the one resulting

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2. Ibid.
in the lowest delivered price is selected by each seller as the applicable or governing base for his price quotation. (See fig. 1). This usually means that the seller will combine the base price and freight costs of the nearest basing point to the buyer in computing his price. This would be the case unless the base price of the nearest base point was high enough to more than offset freight charges from a more distant base point. (See fig. 2).

Since all the mills sell to any consuming point as if the product had been shipped from the basing point whose base price plus freight made the lowest sale price, mill net or actual amount received by the producer after freight has been considered, will vary according to the proximity of the seller to the buyer in terms of freight. If the seller is in a less fortunate position freight-wise than is the governing basing point, he is said to be at a freight disadvantage and must resort to freight absorption to make his sale. (See fig. 3). If, on the other hand, he is in a comparatively better position freight-wise to the buyer than is the governing basing point, he has what is termed a freight advantage and is the recipient of phantom freight, or payment for freight charges which do not exist. (See fig. 4). Since freight is nearly always figured on the basis of rail shipment costs, a seller may be at a freight advantage and receive phantom freight if there is some alternative cheaper method (for example water transportation) of shipping his product to the buyer.
One of the most important outgrowths of delivered pricing is the practice of market penetration. Since all mills use the basing point which results in the lowest delivered price to any particular buyer, it is possible for them to compete in any market, regardless of how far it is from their plant. Thus, in figure 1, even though A is the logical supplier of the market X, and can supply this market and realize a higher mill net price than can the other plants in this diagram, the other plants can and do sell at X at the same delivered price as quoted by A even though they realize lower mill nets on their sales. "Market penetration occurs constantly because most of the larger producers (of steel) in order to operate at a low unit cost compete in all of the major markets for the products they make. Consequently, while one mill sells for delivery at points nearer to other mills, it finds that more distant mills are making sales for delivery in territories nearer to it."¹ These shipments have been called "cross hauling." It is suggested that this term be given a more definite meaning, and confined to shipments of identical products which occur at about the same time.² (See fig. 5).

Ordinarily, the natural market territory of any producer is thought of as the territory in which this particular seller can make sales at a lower price than can any other seller of the same product. It is readily apparent that this could not

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2. Ibid.
be the case under a system of delivered pricing. When every seller quotes the same price to every buyer as is quoted by every other seller, regardless of distance from the buyer, the old concept of the natural market territory is no longer valid. Thus, the natural market territory of a seller in a basing point system is defined as that area in which the mill can use a delivered price calculated on the basis of its own base price plus the actual freight to the point of consumption. (See fig. 6). The mill has a competitive advantage in selling in its own natural market territory, but it must absorb freight in order to make sales in the natural market territory of any other base mill. This means that when the mill sells in some other mill's natural market territory it must receive a smaller mill net return than that made on sales in its own territory. (See fig. 7).

The existence of a non-base mill does not alter the natural market area under the basing point system since in no case are prices ever computed on the basis of a non-base mill. (See fig. 6). If, however, the non-base mill becomes a basing point, the natural market structure is altered drastically. (See fig. 8). In this case, the new base mill has its own market area and the old basing points must now compute prices to consumers in this area on the basis of the new point's base price and freight costs.

The above discussion of the mechanics of the basing
point system and the accompanying diagrams present only a very brief and incomplete picture. In the opinion of the writer, these illustrations do, however, contain the essentials of the system.

A discussion of "extras" has been deliberately omitted from the discussion in order to simplify it. "Extras" are amounts added to, or deducted from, the base prices announced for product classes in order to take care of the particular buyer's specifications of size, special quality, special treatment, or quantity.1 Prices quoted for delivery at given destinations, which include "extras", are called net delivered prices. Omission of "extras" from the above discussion in no way invalidates the discussion.

THE BASING POINT METHOD

Figure 1: Determination of the governing base under a multiple base system.

The basing point at A is governing for sales to the consumer at X. The other basing points would have to compute prices on this base.

FIGURE 1
THE BASING POINT METHOD

Figure 2: Illustration of case where nearest base to consuming point is not the governing base.
Both A and B are governing bases to consumer X. Only A, however, governs to consumer Y, even though A is further from Y than is B. This is because of the higher base price at B.
THE BASING POINT METHOD

Figure 3: Illustration of freight disadvantage and freight absorption.
Mills at B and C are at a freight disadvantage to consumer at X as compared with mill at A. To make sales at X, they must absorb freight.

FIGURE 3
THE BASING POINT METHOD

Figure 4: Illustration of freight advantage or phantom freight.
Mill at A has lowest base price plus freight to X.
Mill at c charges the same delivered price. Having a freight advantage of $1 over A, c realizes a mill net $1 higher than A. This $1 is phantom freight. Note that mill c is a non-base mill.

![Diagram of the Basing Point Method with a freight advantage illustration](image-url)
THE BASING POINT METHOD

Figure 5: Illustration of cross-hauling.
Products shipped from A to Y go past products shipped from B to X. This involves cross-hauling only if:
1. The products shipped are identical.
2. Shipments occur substantially at the same time.

FIGURE 5
THE BASING POINT METHOD

Figure 6: Illustration of natural market territory under the basing point system.

Mills at basing points A and B realize full base prices on sales in their respective natural market territories as described by the boundary O-O. Non-basing point mill at C has no base price and meets the delivered prices of A and B when it sells in their respective natural market territories.

FIGURE 6
THE BASING POINT METHOD

Figure 7: Illustration of how shipping beyond boundary of natural market territory reduces mill net.

When mill B sells to X, its mill net is $40.
When mill B sells to Y, its mill net is only $37.

1. Freight is $2 higher.
2. Delivered price is $1 lower.

FIGURE 7
THE BASING POINT METHOD

Figure 8: Illustration of the effect of naming a new basing point. After C becomes a basing point, the boundary C-O that lies between A and B ceases to be significant. Mill at C then has a natural market territory bounded by N-N and N'-N', in which it establishes lower delivered prices than A or B. To sell in this territory, mills at basing points A and B must now absorb freight.
LEGAL ASPECTS, LEGAL DEVELOPMENT, AND IMPORTANT CASES

INTRODUCTION

The basing point system may be attacked in the courts under the Sherman Act, the Clayton Act, or the Federal Trade Commission Act. Suit has been brought under all three of these laws. Successful prosecution, however, has resulted only under the Clayton and Federal Trade Commission Acts.

The following is a list of the possible legal provisions under which the government could ask the courts to condemn the basing point system as used collectively by an industry. As stated above, successful prosecution has resulted only in cases based upon those portions of the Clayton Act, and the Federal Trade Commission Act, which are listed below.

1. If the system arises as a result of agreements whose existence may be proved directly or inferred from their effects. (Sherman Act, Sec. 1)
2. If the system is maintained by competing sellers who are aware that concerted action is contemplated and invited. (Sherman Act, Sec. 1)
3. If the system enables a large firm to impose its price policy on the smaller firms in the industry and is thus a part of an attempt to monopolize. (Sherman Act, Sec. 2)
4. If the system is the result of agreements designed to avoid price competition. (Federal Trade Commission Act, Sec. 5)
5. If the system is maintained by competing sellers following a common course of action which results in a limitation of price competition. (Federal Trade Commission Act, Sec. 5)
6. If it constitutes conscious parallel action resulting in a limitation of price competition. (Federal Trade Commission Act, Sec. 5)

7. If members of the system are guilty of charging different prices to different buyers, not justified on the basis of cost. This constitutes a lessening of competition, and price discrimination. (Clayton Act, Sec. 2, as amended by the Robinson-Patman Act)

8. If the charging of different prices to different buyers is not justified on the basis of cost and imposes upon small competitors substantial reductions in income, jeopardizing the continuance of effective competition by these sellers and constituting price discrimination. (Clayton Act, Sec. 2, as amended)

9. If charging different prices to different buyers not justified on the basis of cost causes substantial differences in the profit margin of the buyers of the product which may effectively reduce competition. (Clayton Act, Sec. 2, as amended)

10. If the system cannot be justified as a method of meeting lower prices of a competitor in good faith, because systematic discrimination which eliminates or reduces competition cannot at the same time be a meeting of competition in good faith. (Clayton Act, Sec. 2, as amended)¹

It has taken a total of 25 court cases and decisions to reach the conclusion finally arrived at in the Cement Case.

¹ Machlup, op. cit., pp. 42-3.
The adjudication began in 1910, and has extended to date. The crucial issues in deciding the question of the legality of the basing point system were (1) whether the system was based on collusive or concerted action in restraint of competition and (2) whether it involved price discrimination injurious to competition.¹

There follows a brief history of significant court decisions as they have developed through the years. These cases have been divided into industries because this method of presenting them seems most logical.

STEEL

The first large scale use of delivered pricing was the Pittsburgh-plus system which was used in the steel industry from about 1909 until 1921. In 1921, the Chicago producers, suffering from unused capacity, broke away from the Pittsburgh base and began quoting their sales on a Chicago base. This same year, the Federal Trade Commission, after receiving many complaints from the Western steel consumers, began an investigation which ultimated in a complaint against the United States Steel Corporation.

In July, 1924, the Federal Trade Commission issued an order to the Corporation and its subsidiaries to cease and desist from the Pittsburgh-plus practice. The order specifically stated that prices were to be based on the cost at the mill plus freight (actual) to the point of destination.

¹ Ibid., p. 47.
(This would be true f.o.b. mill pricing.) The effect of the order was not the abandonment of the basing point system, but simply the changing of the system by increasing the number of basing points from a single to a multiple base plan. This had the effect of bringing sharp reductions in prices west of Chicago and the Western consumers were satisfied for the time. The Federal Trade Commission's order applied only to the United States Steel Corporation and its subsidiaries, so a large portion of the steel industry remained under the old system. In spite of the fact that the order was openly violated, no further attempts were made to enforce it. Even the announcement of new basing points proceeded only very slowly. For several years, the only effect of the order was an increase in the number of mills designated as basing points.

With the coming of the great depression in the 1930's, there developed some open price competition in the sale price of steel. This outbreak of price competition was stopped through the use of governmental power delegated to the large steel producers on the theory of industrial self-government under the National Industrial Recovery Act of 1933. The regulations of the N.R.A. Code of Fair Competition restored the rule of the basing point system, and probably made it more absolute than it had been before.

2. Ibid., p. 68.
All the rules which had been secret and voluntary now became public and compulsory. The basing point system was enforced by means of prohibitive fines. When the N.R.A. was declared unconstitutional in 1935, and the period of self government of industry was ended, the pricing practice in the steel industry continued undisturbed. The apparatus of price control, no longer legalized, had to go underground. There is evidence that the rules of the N.R.A. code not only continued in effect, but were amended and supplemented after its dissolution.1

In March, 1938, an amendment to the Federal Trade Commission Act, provided that every order of the Commission should become final, and its violations punishable, unless a petition for review was filed in the Circuit Court of Appeals. This new provision of the law forced the United States Steel Corporation to file a Petition for Review in May, 1938, asking the Court to set aside the 1924 order of the Federal Trade Commission. Neither the Commission nor the Corporation were anxious to press the case, however, and little action was taken. At this time, the Commission had begun its case against the Cement Institute, and it seemed likely that this case would provide the basis for settlement of the Steel Case.2

The War again postponed action, and in 1946, the United States Steel Corporation filed a "Petition for a Clarification

of the Order under Review." The Corporation asked the Court
to modify the order of the Federal Trade Commission in such
a way as to eliminate the prohibition against freight absorp-
tion. The answer to this came in the form of the Cement Deci-
sion handed down in 1948. In 1947, the Commission issued a
Complaint against the American Iron and Steel Institute and
101 firms in the steel industry. The Complaint charged the
firms with having followed, "...a common and cooperative
course of action in their...use of basing point practices."
The industry did not give up its legal battle with the Fed-
eral Trade Commission, and continued to insist before the
Commission as well as before the Court, that its basing
point system was lawful. At the same time, however, it dis-
continued using the basing point system (July, 1948) and
started selling steel on an f.o.b. mill basis. It explained
this action by pointing to the fact that the system had been
declared illegal.

This decision by the steel industry to abandon the basing
point system was apparently part of a grand strategy for taking
the case to Congress to obtain special legislation.\(^1\) The method
chosen served to raise steel prices and thus to create a demand
for return of the "cheaper" basing point system. If the tran-
sition from the basing point system to uniform f.o.b. mill
pricing were to be made without increasing the average mill
net price, this average mill net price would have to become

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1. Ibid., p. 72; The Iron Age, July 1, 1948, p. 119.
the uniform f.o.b. mill price. Base prices are usually set at a high enough level to allow for freight absorption. To set the f.o.b. mill price, instead, at the level of the former base price was to raise prices quite deliberately and was by no means a necessary consequence of the transition to the uniform f.o.b. mill pricing formula. This price increase was made possible by the combination of the cost increases and the excess of demand over existing capacity in the early post-war era, as well as by a high state of organization within the industry. Most observers agree that this price increase was contemplated whether the basing point system was abandoned or not. It offered an excellent opportunity to put the new f.o.b. mill pricing system in an unfavorable light at the outset. Combined with the price increase, were the difficulties of adjusting to a new pricing system, as well as threats on the part of steel producers that relocation of plants to conform with the new pricing system would be very costly and would further raise prices. These and similar items were used by the steel industry to put the new system at a disadvantage with the public from the start. The management of steel makes no secret of its desire to return to the old, more controllable system. It is at present doing everything in its power to bring about this end. 1

CEMENT

Court action against the use of basing point pricing in the cement industry was begun in 1923. The District Court decided that there was unlawful combination in restraint of trade in the industry. The cement producers under the leadership of the Cement Association appealed the case to the Supreme Court. In their case, the cement producers tried to prove that uniform delivered prices were a natural result of perfect competition. In the words of the Court: "A great volume of testimony was also given by distinguished economists in support of the thesis that in the case of a standardized product sold wholesale to fully informed buyers, as were the dealers in cement, uniformity of price will inevitably result from active, free, and unrestrained competition." The Court was persuaded by this argument. It was thus that in 1925 the multiple basing point system in the cement industry was, in effect, sanctioned by the Supreme Court.

There seems to be but little doubt that price competition was absent in the cement industry since the base prices remained unchanged from January, 1933, to June, 1938. Also, the industry was brought together by mergers so that by 1937 the five largest firms in the industry controlled over 39 per cent of the total capacity.

In 1937, the Federal Trade Commission issued a Complaint against the Cement Institute and 74 cement companies. The proceedings in this case included testimony as to the facts as well as the economic issues involved, and a large number of academic economists were called as expert witnesses. Finally in July, 1943, the Commission issued a Cease-and-Desist Order. The Cement Institute and the companies appealed to the courts. The first decision was handed down by the Circuit Court of Appeals in 1946.\(^1\) This decision set aside the order by the Federal Trade Commission and in effect sanctioned the use of multiple basing point pricing. The Federal Trade Commission appealed this decision to the Supreme Court of the United States, which in 1948 set aside the decision of the lower Court and upheld the Commission's order by a 6 to 1 majority.\(^2\)

The Federal Trade Commission's order was upheld by the Supreme Court on two counts. The first was that the basing point system, as used by the cement industry, was unfair competition in violation of the Federal Trade Commission Act. The second was that the industry's use of the system constituted systematic price discrimination injurious to competition in violation of the Clayton Act as amended by the Robinson-Patman Act. The Court rejected the contention that price discrimination inherent in systematic freight absorption is


lawful as a price reduction, "made in good faith to meet an equally low price of a competitor."¹ This provision of the Robinson-Patman Act bears, according to the court, only on "...individual competitive situations, rather than upon a general system of competition."²

As was the case in the steel industry, the cement industry used the transition from basing point to f.o.b. mill pricing as an excuse for raising prices. This was possible in cement, as in steel, because at the existing prices, demand had been in excess of the existing capacity of the industry. At present, the cement industry is also making every effort to return to basing point pricing.³

**CORN PRODUCTS**

The corn products or corn derivatives industry is concerned with the production of such things as corn syrup, glucose, corn sugars, dextrins, starches, and corn oils. Corn syrup is the chief sweetening ingredient in nearly all sorts of candy and is also widely used in jellies and jams. Corn products are also found in baby's formula, canned fruit, bread, book bindings, soap, and numerous other articles found in everyday use in almost any household.

The corn products industry was quite competitive in the beginning, but it eventually became consolidated into the

¹. Language of Section 2b of the Robinson-Patman Act. If this can be proved, prosecution is not possible.
². From the majority opinion in the Cement Case cited above.
hands of a few producers through a system of mergers. The mergers were declared to be illegal in part, so the industry resorted to trade associations to conduct its price policy. The first scheme used was a single basing point system with all prices issued on a Chicago base. This was abandoned after a time, and a multiple basing point system combined with zone pricing was adopted.

The Federal Trade Commission issued a Cease-and-Desist order to two of the firms in the industry in 1938, 1939. The producers appealed to the courts for relief from these orders, and in April, 1945, the Supreme Court handed down two decisions. The first of these decisions was handed down in what is called the Corn Products Case. In this case, the plants of the company were located in Kansas City and prices were based on delivery from Chicago. Chief consumers of the products of this company were candy producers. The effect of the company's price policy was to give a competitive advantage to the producers located at Chicago as against those located closer to the plants. The Supreme Court found that the differences in price could not be justified by differences in cost such as would have made them lawful under the Clayton

1. Ibid., p. 84. By 1906 the Corn Products Refining Company controlled 100% of the production of glucose. The National Starch Manufacturing Company controlled 80% of the starch production in the United States.
2. Ibid., p. 86. Packaged goods were sold by zones and bulk goods were sold on a basing point arrangement.
Act as amended. The Supreme Court upheld the order of the Commission.¹

The second of these decisions was handed down in what is called the Staley Case.² The Staley Plant was located in Decatur, Illinois and it too based its prices on a delivered-from-Chicago basis. The discrimination and injury arising from this pricing practice was much the same as that in the Corn Products Case. Staley, however, offered the defense that its price policy was directed at meeting the prices set by Corn Products. The Court said that "...the Commission's conclusion seems inescapable that respondent's discriminations, such as those between purchasers in Chicago and Decatur, were established not to meet equally low Chicago prices of competitors there, but in order to establish elsewhere the artificially high prices whose discriminatory effect permeates respondents entire pricing system." As a result of the above named decisions, four trade associations which had performed services helpful in ensuring observance of the basing point rules were dissolved in September of 1946.

The Federal Trade Commission found it necessary in June, 1947, to proceed with a new complaint against 19 firms comprising about 95 per cent of the industry. Among the firms are the two who lost their cases before the Supreme Court in

the above decisions. The Commission charges that the industry is still fixing prices on a Chicago base as well as indulging in other collusive practices. This complaint is still in the courts at the time of this writing, but if the Commission is upheld, the Corn Products and Staley Cases will be viewed as special cases in an industry-wide collusive plan.¹

STEEL CONDUIT

The Federal Trade Commission issued a Cease-and-Desist order to the Rigid Steel Conduit Association in connection with their pricing practice. In this case, the Commission found not only that the producers had conspired to adhere to a pricing plan, but also that each individual producer had adopted the basing point system in the knowledge that the others were doing likewise. This action constitutes illegal elimination in violation of the Federal Trade Commission Act.²

The Association appealed this order to the courts. The Circuit Court of Appeals upheld the Commission's order and the Association appealed the case to the Supreme Court. In April, 1949, the Supreme Court by a 4 to 4 decision upheld the decision of the lower Court.³ This case was viewed as being especially significant since it was, in effect, a test of strength for the Cement Decision.

1. Ibid., p. 831.
2. Ibid., p. 833.
PROBABLE LEGAL STATUS

In all the above cases, the Court and the Commission have based all their decisions upon the existence of a conspiracy to fix prices, sometimes accompanied by a conspiracy to restrict competition in other ways. The Commission's proceedings have not been directed against the basing point system per se, but against conspiracy or collusion resulting in price discrimination which, in its turn, is a departure from price competition. This has created a vast amount of speculation on the part of academic economists, government employees, and businessmen as to the exact legal status of the basing point practice.

In the hope of clarifying the issue somewhat, the Temporary National Economic Committee made the following statement in 1941:

"Extensive hearings on basing point systems show that they are used in many industries as an effective device for eliminating price competition... The elimination of such systems under existing law would involve a costly process of prosecuting separately and individually many industries, and place a heavy burden upon antitrust enforcement appropriation... We therefore recommend that the Congress enact legislation declaring such pricing systems to be illegal."

Congress took no action on the T.N.E.C. recommendation at the time because the War had begun in Europe and Congress was busy with defense preparations.

After the Cement Decision in April, 1948, clarification of the legal status of basing point pricing systems seemed to become a pressing need. Speculation as to the implications of this decision has appeared on all sides, and has been extremely varied. Justice Black of the Supreme Court made a statement implying that the Cement Decision would make basing point pricing illegal in nearly all cases. Mr. Lowell Mason of the F.T.C. echoed this sentiment when he said, "I believe that an individual delivered price system is out. I believe that freight absorption is out. I believe that zone prices are out."¹ On the other side of the argument is the statement of Mr. Robert Freer, Chairman of the Federal Trade Commission:

"Now in the light of that analysis, I would just like to offer two conclusions for you. The first is that basing point and delivered price systems, as such, are under no special attack. In proceeding against collusive price fixing, and injurious discrimination, the Commission has attacked those delivered price systems where they appeared to be the core of price fixing conspiracies or destructive of competition. Second, it has been too broadly asserted that all delivered prices are unlawful. No Commission order has yet required f.o.b. mill pricing, nor forbidden freight absorption, except in a context of price fixing or destruction of competition, and since, of course, the Commission has entered no such order, the courts have sustained none."²

It seems likely, that the opinions of Justice Black and Mr. Mason are rather extreme points of view. Mr. Freer's statement is a much more rational and probable statement of

². Ibid., p. 143.
the present legal status. Certainly, the action of the F.T.C. has been more in keeping with this statement.

At present, the F.T.C. holds that it is necessary to look into the circumstances of a particular industry before deciding whether there is cause for legal action. Legal action will be brought only if:

1. The delivered pricing system is part of a conspiracy to eliminate price competition.¹
2. There is unlawful price discrimination; i.e., buyers are charged different prices where the difference is not fully justified by differences in cost. Such price discrimination is unlawful only if it injures competition among buyers, or substantially lessens competition among the firm's immediate competitors.²

CONGRESSIONAL ACTION

In an attempt to clarify the issue, Senator Homer E. Capehart (R) of Indiana submitted a resolution authorizing the Senate Committee on Interstate and Foreign Commerce to conduct an inquiry into the impact of the court decisions on business. The Committee was to make its study and present recommendations to Congress for appropriate action.

As the result of this Committee's activity a bill was introduced in Congress in the summer of 1949 which would have

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¹ Sec. 1 of the Sherman Act.
² Sec. 2 of the Clayton Act as amended.
declared a moratorium on F.T.C. activity in connection with basing point pricing for one year. This bill was defeated, however, and a bill introduced by Senator O'Mahoney (D) of Wyoming was proposed in its stead.

The O'Mahoney bill declares the basing point system to be legal only when used by a single seller and without other price discrimination. This means that under the F.T.C. and Robinson-Patman Acts, delivered pricing and freight absorption will not be illegal when used by a single producer. The Carrol and Kefauver amendments to the O'Mahoney bill, if adopted, would make it illegal to absorb freight costs in "good faith" where the action would violate the Clayton Act as amended. These amendments have the effect of killing the "good faith" arguments for delivered prices. This bill, as amended, passed both Houses of Congress and was sent to the Conference Committee. In this Committee, the amendments were stripped from the bill and the wording of the bill changed in such a way that the "good faith" argument could be used in support of a delivered pricing system. Also, the wording was changed in such a way that the burden of proof that a price fixing conspiracy existed would fall to the F.T.C. The net effect of this, of course, would have been to weaken the F.T.C.'s chances for successful prosecution of industries using the basing point system. The bill as reported from the Conference Committee passed the House, but a bitter
argument developed in the Senate and consideration of the bill was postponed until the next session of Congress.\(^1\) Thus, at the time of this writing, there is no new legislation clarifying the legality of the basing point system.

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POSSIBLE IMPLICATIONS OF THE ABOLITION OF THE BASING POINT
SYSTEM OF PRICING ON THE UTAH STEEL INDUSTRY AND ON
THE ECONOMY OF THIS REGION

THE GENEVA STEEL PLANT

All the steel produced in the State of Utah at the present time is produced at the Geneva Plant. This Plant not only produces for the immediately surrounding territory, but for certain segments of the market throughout the West. Its size and the diversity of its market outlets make it a particularly good model for a study of the type proposed in this paper.

The Geneva Plant was built at the request of the Office of Production Management by the United States Steel Corporation without fee. The original cost of construction to the government was $191,000,000. The steel products to be made by this mill were plates and structural shapes for the needs of the Pacific Coast shipyards.

Since it takes approximately five tons of raw material to produce one ton of steel, it is apparent that the steel producing point must be located with an eye to proximity to raw materials rather than to markets. In selecting a site within the State of Utah, consideration had to be given to a location possessing adequate transportation facilities and situated at minimum distances from sources of iron ore, coal, limestone and dolomite; it was necessary also to select a place where sufficient fresh water was available. These considerations,
along with the government's wish to decentralize the new war plants, resulted in the selection of the Geneva Plant site on the shore of Utah Lake near the city of Provo. 1

The Geneva Plant is very favorably located with reference to the transportation costs on raw materials. Its coal is shipped a distance of 120 miles, its iron ore comes from Southern Utah open pit mines and moves a total of 255 miles and its flux (limestone and dolomite) moves 35 miles. In the words of Walter Mathesius, President of the Geneva Steel Company:

"Material assembly costs for Geneva are favorable. We can produce excellent steel for the Western market as cheaply as anyone and more cheaply than most. Geneva is a fine steel plant." 2

As regards transportaton facilities, Geneva lies at the junction of the railroad lines over which raw materials are assembled; at the apex of the railroad lines that fan out to the three principal Pacific Coast markets and those running to the North, East, and Southeast. Also its labor supply can be drawn from the largest communities in the region.

The plant has three blast furnaces with a daily capacity of 1100 tons each, making a combined annual total of 1,150,000 net tons of pig iron. There are nine open hearth furnaces each with an annual capacity of 1,280,000 net tons of steel ingots. The plate mill has a capacity of 700,000 net tons

of finished plates per year, and the structural mill, 200,000 tons of various types and sizes of structural steel. In December of 1948, facilities were completed for the production of hot rolled coils. This will not change the above mentioned plant capacities except that much of the steel which formerly left Geneva as plant and structures will now leave in rolled coil form.1

At the close of World War II, the emergency need for Geneva's vast plate and structural steel capacity no longer existed. Thus, the plant was listed for sale under the provisions of the Surplus Property Act. The United States Steel Corporation almost immediately submitted a bid. Opposition to the sale of Geneva to this Corporation developed in certain governmental quarters, on the grounds that it would make for monopolistic control of steel capacity in the Western United States. For this reason and others, the United States Steel Corporation withdrew its offer. This action by the Corporation resulted in an immediate movement in Utah to have the Geneva Plant owned and operated by U.S. Steel. In view of this strong opinion in the West and requests of government officials that the Corporation reconsider its decision, United States Steel submitted a bid to purchase the plant and inventories at Geneva for $47,500,000 and pledged that in the event of acceptance of its bid, not less than $18,600,000 additional of its

own funds would be spent in the peacetime reconversion of the Geneva Plant. This bid was accepted, and peacetime operations of Geneva Steel as a subsidiary of the United States Steel Corporation began on June 19, 1946.  

THE COMPARATIVE POSITION OF THE GENEVA PLANT

It will be helpful, before any significant conclusions are drawn concerning the effect of the new pricing policy on the Geneva Plant, to take a brief look at the competitive position of Geneva with reference to the other Western steel producers as well as the possible competitors from the East. Before any analysis can be made concerning the effect of the new pricing policy on the Geneva Plant, it is necessary to ascertain just how the Geneva Plant compares with other plants throughout the United States and especially in the Western United States, as regards proximity to raw materials, types of steel products needed and produced, and production facilities.

Western steel capacity is largely concentrated in the production of bars, light structural steel, rail and other track-age supplies, flat rolled or plate and thinner than plate gauge steel, and wire and wire products. 2 (See fig. 9) Of these various products, Geneva produces light structural forms, plate, and thinner than plate rolled steel. Figure 9 reveals that in 1944 the Geneva Plant was the leading Western

Capacities of Western Steel Plants By Types of Products 1944

(1000 Net tons)

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FIGURE 9

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producer of light structural and plate steel. The recent addition of facilities for rolling plate steel to hot rolled coils of thinner than plate guages has changed this picture somewhat so that now the Geneva Plant is producing a significant amount of rolled steel coils and smaller amounts of plate and structural steel than formerly. Western capacity in the production of light structural steel seems to be more than adequate to meet the demand. The demand for structural shapes at Geneva has dropped off to the extent that it was necessary to close the mill in June, 1949. The structural mill was reopened for limited production in December of the same year, but the demand for structural shapes continues relatively weak, and the future of this mill at the present time is uncertain.

The combined Western capacity for the production of steel plate, and strip of thinner than plate guages, prior to construction of the Geneva and Fontana Plants was estimated to be enough to supply only about 10 per cent of the normal Western demand. This should assure the Geneva Plant a strong and rather steady market for its plate and hot rolled steel products. The most recent figures indicate that this is, in fact, the case. The plate mill and the hot rolled coil

1. Letter from Paul Sullivan, Director of Public Relations for the Geneva Steel Company, to the writer under the date of January 17, 1950. (Hereafter referred to as Sullivan Letter.)
2. Ibid.
facilities were used at 100 per cent capacity until the middle of 1949, and have been operated at from 70 to 80 per cent of capacity since that time.¹

In ascertaining the comparative position of the Geneva Plant as regards the costs of materials, it is necessary to mention the location of the various materials, the comparative costs of the materials including transportation costs, and the amounts of the materials available for exploitation.

The Geneva Plant produces steel from pig iron, using only the minimum amount of scrap steel necessary to insure efficient operations. Iron ore and coking coal are of approximately equal importance as basic raw materials for the production of pig iron.² Evidence of the favorable conditions under which iron ore has been mined in Southern Utah, is provided by the fact that production was approximately 6.4 tons per man-hour in the period from 1937 to 1941. These calculations are based on all of the employment required for mining the ore, delivering it to the crusher and loading it on the railroad cars. Production in the open pit mines on the Mesabi range in Minnesota is approximately 3 tons per man-hour; in the underground mines of Alabama it is about .7 tons. Add to this, the fact that the ores mined in the Mesabi range must move by rail a distance of 77 miles to loading docks, be unloaded from the railroad cars and reloaded on ships. Then it moves 876 miles over the Great Lakes, is loaded again onto railroad

¹ Sullivan Letter.
cars, and then moves an average distance of 123 miles to the Pittsburgh area.\(^1\) Geneva's iron ore moves 255 rail miles only.\(^2\)

The extent of the ore deposit now being used by the Geneva Plant is not definitely known. This deposit, of course, will be exhausted at some future date. Just where the plant will then turn to secure its ore is not certain, since complete knowledge of the extent, quality, location, and mining costs of all the possible sources of iron ore in this area has not yet come to light. In any event, it is probable that the great bulk of the iron and steel industry of the United States will have to turn to higher cost iron ore considerably sooner than the period when this will be required of the Geneva Plant.\(^3\)

Probably the most important competitor of Western steel producers, particularly in the Pacific Coast markets, is the Sparrows Point Plant of the Bethlehem Steel Company. A comparison of the costs of producing steel at this plant and at the Geneva Plant is extremely difficult since the costs at Sparrows Point are not obtainable. This plant imports its iron ore from the El Tofo mines in Chile. These mines are located only fifteen miles inland from the port of Cruz Grande. The ore is loaded here on company owned ships for the trip, 4477 miles to Baltimore. The ships return empty. In the past, the price of the Chilean ore has been very low, but by the

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1. Ibid., p. 16.
2. Ibid.
3. Ibid., Part I, p. 16.
time the shipping costs, including the canal tolls, have been added, the price of this ore has been about the same as the ore used by Pittsburgh plants.1

The above facts seem to indicate that the cost of production of pig iron in Utah is probably less than for the plants around Chicago, Pittsburgh, and other centers dependent on Lake Superior ores; also, that in all probability, the cost at Sparrows Point, Maryland, is somewhat in excess of the cost at Geneva.

It is more difficult to make a comparison between the costs of producing pig iron at Geneva and at the West Coast production points. Aside from the steel plant at Pueblo, where the typical relationship between pig iron and scrap has prevailed, Western steel manufacturing has been based primarily on scrap. That is, scrap steel is used in much larger quantities in proportion to pig iron than is usual in steel production.2 Most of the pig iron used by plants on the West Coast comes from the blast furnaces at Ironton, Utah, and some comes directly from Geneva.3 This means that the pig iron used in the Pacific Coast plants must travel an average distance of from 700 to 800 miles by rail. There are blast furnaces for the production of pig iron at the Kaiser Steel Company's Fontana Plant near Los Angeles, but the capacity is only 432,000 net tons annually. In addition to

1. Ibid., p. 18.
2. Ibid., p. 27.
this, all coking coal for the operation of this blast furnace comes from the Utah coal fields, which means that it must travel about 800 miles by rail.¹

As regards coal suitable for coking and blast furnace use, Geneva is, again, favorably situated. The total reserves of all the coal of the eleven Western States amounts to approximately one half the total reserves of the United States. Of this enormous reserve, 48 per cent is located in the continuous and almost unbroken Tri-state field in Southwestern Wyoming, Western Colorado, and Southeastern Utah. There is very little coal west of Western Wyoming and central Utah.²

Most of the known Western reserves of coking coal are located in Utah, Colorado, and New Mexico. There may be some important deposits in Washington, Wyoming, and Montana, but to date, these fields have not been explored.³ This means that of all the Western producers of steel, Geneva and Pueblo are the only two plants which are located within easy distance of coking coal deposits. (See fig. 10.)

As for the relative costs of scrap, there is no reason to think that any large price differential exists between Geneva and the other Western producers. Nearly all the scrap used by the Western plants comes from the Western States. Most of the supply of steel scrap comes from the operation

² Ibid., Part I, p. 7.
³ Ibid.
Location of Blast Furnaces in Relation to Raw Materials

(Iron Ore and Coking Coal) Western District

FIGURE 10
of the steel furnaces and rolling mills, so it is not unlikely that the Geneva Plant is largely self-supporting in this material.

Most of the important ferroalloys are found in sizeable amounts in the Western United States. The Geneva Plant is as favorably located with reference to these as are any other producers in the United States.¹

One important raw material which is often overlooked but which is extremely vital to the operation of a steel plant in Utah, is water. The limited supply in Utah makes it necessary for those who are operating the steel plant to become quite efficient in the proper and full utilization of the water which may be available for use.² Militant conservation, however, should make the supply adequate.

Not the least of the considerations on selecting the site for the Geneva Plant was the availability of labor. The Geneva Steel Company employs 5500 men, one half of them at the steel plant. The problem with reference to labor was not so much one of getting men as getting trained industrial workers. This problem seems to have been solved to the satisfaction of all. Most of the employees were small farmers before they began working in the Geneva Mill, but the facts indicate that they have adjusted very rapidly and have become as efficient as most steel workers in other, more highly industrialized, areas.³ The Geneva Plant compares favorably with

¹. Ibid., pp. 19-27.
other plants in the United States as regards the quality and quantity of its labor supply.

The only other consideration necessary to point out the relative position of the Geneva Plant in the Western steel market is the comparative adequacy of its plant and equipment. The large amount of area available for the construction of this mill has enabled the optimum location of the various devices necessary to the productive process. Conveyor belts move the various raw materials to the assembly points. All the ingredients necessary for the production of pig iron are moved directly from the stockpiles to the blast furnaces by a conveyor system.

The plant is arranged to allow for some diversity in the final products. The Plant is equipped with a slabbing and blooming mill which may produce either blooms for the structural mill or slabs for the plate mill. Slabs may be either used immediately or stored for conditioning and scarfing to eliminate defects. The Geneva plate mill is officially classified as a semicontinuous mill. This mill is equipped with all the latest machinery and patterned after the most recent continuous plate mills that have been constructed in the main steel centers of the country.1

In December, 1948, installation of the necessary facilities for the production of hot rolled coil were completed. With the installation of the new equipment, including a slab

1. Ibid., p. 43.
squeezer, a vertical edger, two giant finishing stands and the coilers, the finishing speed of the combined plate and coil mill has been increased to a maximum of 2,200 feet per minute, approximately double the former speed.\(^1\) It is undoubtedly this addition to the capacity of the plate and coil mills that has allowed the plant to operate at from 70 to 80 percent of capacity in spite of the shutdown of the structural mill.

This plant and equipment compare very favorably with the other Western steel producing facilities. Since the Western producers are, with the exception of the Colorado Fuel and Iron Company's Plant at Pueblo, Colorado, based on the use of scrap, they can never do more than supply a small part of the total steel needs of the West. Costs at Geneva are enough lower than those of the Pacific Coast States producers that there should be no great difficulty for the Geneva Plant to compete in the sale of steel on the West Coast. This contention is borne out by the fact that at present, the Geneva Plant is finding their principal market outlet on the West Coast in spite of the transportation costs involved.

EFFECT OF THE NEW PRICING POLICY ON THE UTAH STEEL INDUSTRY

The steel industry, including the Geneva Steel Company, abandoned the basing point system of computing delivered prices in July, 1948. At this time, the demand for steel

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was in excess of the supply, and nearly every mill in the United States was producing at capacity. Since the market was not what past experience would indicate as the usual thing in the steel industry, any factual or statistical study of the changes occasioned by the new pricing system, uniform f.o.b. mill pricing, must be postponed until such time as the market situation approximates what it has been in previous years. Also, the Geneva Plant had been operated as a private concern only since June, 1946. This is hardly enough time to allow a comparison of the conditions before and after the changed pricing policy to be made. It is for these reasons that the study is made on the basis of economic analysis rather than facts and figures.

UTILIZATION OF CAPACITY

The steel industry is characterized by very high fixed costs relative to variable costs. This has lead to an estimate that the average steel mill must produce at from 30 to 50 per cent of capacity to cover the overhead or fixed costs. This means, in effect, that costs and profits in the industry are very sensitive to changes in the rate of capacity utilization, average unit costs varying inversely, and profits directly, with the volume of output. The effect of uniform f.o.b. mill pricing, as an alternative to basing point pricing, on the utilization of capacity is, therefore, of fundamental importance in determining whether the Geneva Plant will be in a stronger or weaker position as a result of the change.

The Geneva capacities are so arranged that some change in the proportions of final products produced is possible. That is, it is possible to convert some of the ingots into either plate or thinner than plate rolled steel, or into light structural forms, depending on the relative strength of the demand for these types of products. In the past, the West has been a surplus area in the production of structural shapes, and a deficit area in the production of plates and strip. Current production figures of the Geneva Plant seem to indicate that this is still the case.\(^1\) If so, the Geneva Plant is in a surplus area with reference to one item of production, and in a deficit area with reference to another. The effects on the capacities for the two types of products might be quite different.

In the case of light structural forms, the existence of a basing point system might have made it possible to utilize enough capacity to maintain production of this product. By absorbing freight, the Geneva Plant could have made sales outside the Western market. Thus, in effect, the Geneva Plant could have dumped some of its product in another plant's market area. In all probability, this would have been done only if it were impossible to change the amounts of the types of final product. So long as the distant sale covered all variable costs and any part of the fixed costs, the officials at the Geneva Plant would have been justified in making it from the

\(^1\) Sullivan Letter.
standpoint of profit. The effect on the steel industry as a whole would have been somewhat different, however. Since the product would have been dumped in another company's territory, the saving in cost of idle capacity accruing to the Geneva Plant would have been offset by the loss to the company in whose area the dumping was done. At best, the aggregate effect on the steel industry would have been neither cost saving nor cost increasing.

In the absence of the basing point system, the proponents of delivered pricing argue, the effect in an area of surplus steel production will be cutthroat competition. They say, that since it will pay the producers in the surplus area or product to make any sales that will cover all variable costs and some part of the fixed costs, every producer in this situation will ultimately lower his price to below the point where total costs are covered. The end result would, of course, be the survival of only the strongest. It does not seem likely that this will be the outcome at the Geneva Plant. In the first place, this plant can switch to the production of the more readily saleable plates and strip without necessitating a drastic cutback in total output. If the price were lowered under uniform f.o.b. mill pricing to the extent that sales could be made in a more distant market territory, that would mean that the prices to local buyers

were likewise lowered. Unless the gains by selling in the more distant market territory were more than enough to offset the losses engendered in selling at a lower price in the more immediate market territory, the sales would not be made. Also, the owners of Geneva do not have investment tied up in the structural mill to the extent that would usually be the case. It must be borne in mind that this mill was purchased at about one fourth the cost of construction. The fact that the structural mill was closed in mid-1949, without a price war being precipitated seems to bear out this contention.

Eighty per cent of the market for structural steel produced at the Geneva Plant is on the Pacific Coast which leaves only 20 per cent sold in the inland Western region. Thus, it would seem that the possibility of other plants penetrating Geneva's principal market, the West Coast, under the basing point system, was fully as great as the possibility of Geneva successfully penetrating other market areas. In the light of this, it seems safe to conclude that the net effect of the abandonment of basing point pricing on the structural mill will be negligible. There seems to be no logical justification for the belief that it would have functioned any differently under basing point pricing than at present.

The situation with reference to plate and hot rolled strip seems somewhat different. Western demand for these

1. Failure to do this would be a violation of Sec. 2 of the Clayton Act as amended. See supra, p. 22.
2. Sullivan Letter.
3. Ibid.
products has been, and continues to be, rather strong.\textsuperscript{1}

The major portion of the steel which leaves the Geneva Plant is probably in the form of hot rolled coils. These are shipped to the cold reduction mill at the United States Steel Corporation’s Pittsburgh Plant located near San Francisco, California.\textsuperscript{2} This movement of plate and hot rolled coils to the Pacific Coast States accounts for 92 per cent of the output of these products at the Geneva Plant. Only 8 per cent of Geneva’s output of these items is consumed in the Mountain States.\textsuperscript{3}

What the effect of the abolition of the basing point system will be upon the utilization of the plate and strip capacity depends upon whether the Geneva Steel Company can compete with the producers of these products on the West Coast in the matter of price. Also, the producers of these products on the Eastern Seaboard must be considered as possible competitors. At the present time, the figures would indicate that Geneva is competing successfully with both these groups. This may not be a true picture, however, since the present time is one of very large demand. Whether the Geneva Plant will be able to compete in the future if there is a large reduction in demand remains to be seen. The facts indicate that on the basis of costs of production, the plant at Geneva should be in a strong competitive position.\textsuperscript{4}

The costs of

\begin{itemize}
\item \textsuperscript{1} Ibid., Mahoney, op. cit., Part I, p. 48
\item \textsuperscript{2} Geneva Steel Company Press Release, under date of December 29, 1948.
\item \textsuperscript{3} Sullivan Letter.
\item \textsuperscript{4} See section on the comparative position of the Geneva Plant, supra, pp. 40-51.
\end{itemize}
transportation, however, are fully as important as the comparative costs of production. At present these are such that the f.o.b. mill price of plate mill products plus transportation costs to the West Coast result in a price which compares favorably with final prices from other plants.\footnote{1} What the freight rates will be in the future is, of course, impossible to say. If there is no significant change, however, it seems likely that the Geneva Plant will continue to supply a large part of the Pacific Coast’s needs in plate and strip steel.

To determine what the effects of the new pricing policy will be, it will be helpful to first see what would have occurred under the basing point system. Since Geneva was a basing point for its own products,\footnote{2} there is no reason why, under the basing point system, sales in this area should not have taken place from Eastern areas on a freight absorption basis. It is doubtful that this would have occurred as yet, since local demand is probably strong enough to absorb Eastern output of steel products in most cases. When demand falls below the level where steel producers can find local outlets for near capacity production, the Pacific Coast, and even the Mountain States, would be subject to market penetration from Eastern producers under the basing point system. Prices from the Eastern mills would, of course, have been computed on a Geneva-plus basis which would have involved some freight

\footnote{1}{This fact is indicated by the ability of the Geneva Plant to sell most of their present output on the Pacific Coast.}
\footnote{2}{“The New Industrial West,” p. 18.}
absorption in nearly all cases. This would have been justified from the standpoint of profit, however, so long as the mill net return to the mill practicing the freight absorption was enough to cover all variable costs and any part of the fixed costs.

Market penetration from the East can occur under f.o.b. mill pricing only if the mill price at the Eastern plant is such that after transportation has been added, the price on the West Coast is as low as the prevailing price in this market. It may be that the Sparrows Point Plant of the Bethlehem Steel Company at Baltimore, Maryland, can share in the Western market on this basis. Eastern producers located inland from the Eastern Seaboard are almost surely eliminated as competitors in the Western market under f.o.b. mill pricing. To lower their mill price to a level low enough to offset the difference in transportation costs between the two areas would be disastrous since this would mean that this lower price prevailed in their local market as well.¹

The adoption of f.o.b. mill pricing assures the immediately surrounding territory as market for Geneva produced steel only. Thus, the 20 per cent of structural steel and the 8 per cent of plate mill products which Geneva sells to the local area are almost certainly going to be supplied by the Geneva Steel Company in any event. For even a West Coast producer to penetrate this market under f.o.b. mill pricing would be extremely unlikely. To do this the West Coast

¹. Sec. 2 of the Clayton Act as amended.
producer would have to lower his mill price to all buyers by an amount sufficient to offset the transportation from the Coast to the Intermountain area.

In the light of the above analysis, it seems likely that the effect of the adoption of uniform f.o.b. mill pricing on the utilization of the plate and strip capacities will be favorable, or, at least, not unfavorable.

POSSIBLE EFFECT ON LOCATION OF FUTURE CAPACITY

The effect of the abandonment of basing point pricing on the possible future locational pattern of steel production in Utah is conditioned by several considerations peculiar to this area. The Geneva Plant, which was built to satisfy wartime demand for certain products, has such large capacities in comparison to what it seems Western demand will be, that it seems unlikely that any new capacity will be added for some time to come. If, and when, the demand in the Western area increases to the point where new capacities are justified, the new pricing policy will undoubtedly play an important role in the locational pattern, however.

Because of the large amount of weight differential in the raw materials and the finished steel, the primary locational factor under any pricing system is proximity to, and availability of, raw materials. Insofar as this is the governing consideration, Utah is favorable as a future site for steel production. Any discussion of future location must have this in the background. As to the effect of the pricing system on
future location, history has shown that the allowance of new basing points has resulted in the movement away from the old producing centers to new ones and the general decentralization of the industry.\(^1\) If this is the result of merely establishing new basing points, it seems likely that the result of abolishing the system would have an even more profound effect in the same direction.

Because of the lack of any raw materials on the Pacific Coast, it seems likely that any future plants which are built in that area, or any expansion of existing plants on the Coast, will have to be on the basis of scrap iron and steel as principal ingredients of the steel production. In the years prior to World War II, the supply of scrap to the Coastal producers was more than ample to meet their needs. With the shipment of large amounts to Japan and other Far Eastern countries just before the War, however, this condition changed, and scrap was in short supply. Although these exports ceased a short time prior to Japan's attack on Pearl Harbor, and although current scrap supplies increased substantially during the War Years as a result of West Coast shipbuilding and other War-time manufacturing activities, the easy supply situation of the pre-War years has never returned, and locally available scrap supplies have since then been hardly sufficient to meet the needs of the greatly enlarged capacity which now exists on the West Coast.\(^2\) If West Coast production continues to

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grow at this great speed, even if the steel plants on the Coast expand proportionally, it is apparent that the portion of the steel industry in the West based on scrap can never supply more than a portion of the needed steel. This means that some additional capacity will have to be added in the areas where iron ore and coking coal are available. Figure 10 indicates that Utah is more favorably situated with respect to these materials than are any of the other Western States. Whether enough raw materials exist in Utah to support any greatly expanded steel output will depend in part on possible new discoveries and technological developments which might make now known deposits usable.

As regards the effect of f.o.b. mill pricing on the future locational pattern, only the broadest generalizations are possible at this time. It seems rather certain that this type of pricing will have a decentralizing effect on future location of productive capacity. Under this system impetus is given to locate as near the consuming market as possible. If a small plant can locate at the point of consumption it has an advantage in the local area over all other producers. This advantage did not exist under the basing point system where anyone could sell in that market on a freight absorption basis. Whether the savings of large scale production are enough to offset this locational advantage remains to be seen. Past cost studies in the steel industry indicate
that this is probably not the case. ¹

An additional future effect of the change in pricing is that under the new system encouragement is given to independent producers to begin small scale operations. Under the basing point system, the independent was at the mercy of the larger producer since the small producer's market was always open to invasion. This is particularly significant in the Western area where the United States Steel Corporation at present controls 51 per cent of the output of steel ingots.² Whether or not the advantage given to the small independent producer is great enough to overcome the tremendous advantage of size of the giant concerns remains to be seen.

POSSIBILITY OF FORCED RELOCATION OF EXISTING CAPACITY

Probably the greatest amount of controversy which has come out of the decisions forcing abandonment of the basing point system in the steel and cement industries, centers in the idea that the adoption of F.O.B. mill pricing will force a vast amount of relocation of existing production facilities. It is argued that these industries have grown up under the basing point system and located in such a way as to profit most from this pricing method. Now that the system has been abandoned, these plants are no longer at optimum locations and will be forced, in many cases, to close down or

move to a more favorable location.

It appears that there might be some justification for these beliefs. The basing point system encouraged the selection of locations on the basis of assembly costs rather than on the basis of proximity to market outlets. This can be easily seen in the case of the Pittsburgh and Detroit areas. Detroit has only 5 per cent of the steel capacity in the United States and consumes 15 per cent of all the steel produced in this country. On the other hand, Pittsburgh and the immediately surrounding area produces 40 per cent of the nation's steel while this same area consumes only 20 per cent of the national output. This means that one half of all the steel produced in the Pittsburgh area must be exported to other consuming regions. The cost differential between these two areas is not large enough to justify this very great discrepancy in capacities.

It can also be shown historically, that the basing point system has tended to encourage the expansion of existing capacity and retard shifts in productive facilities. In both the steel and cement industries, there has been a notable reluctance to grant basing point status to new mills. This delayed installation of new producing points as basing points, with base price differentials smaller than freight differentials

from old areas, has kept the delivered price at too high a level to permit sufficient demand to develop in the new area. This has retarded the growth of regional production capacity.  

The intensity of feeling about the possibility of forced reallocation is exemplified by the following statement made by the General President of the United Cement, Lime and Gypsum Workers International Union before the Senate Subcommittee on Trade Practices:

"The moving or closing of any of these large cement plants, or even part of a plant, would disrupt the community life of these small towns, because these small towns are more often one-industry communities. At that, it would be impossible for most of these workers to migrate to new locations because of family conditions and other reasons, and it would all result in the creating of small ghost-towns, such as we have experienced in coal-mining communities after the supply has been exhausted..."  

That the adoption of f.o.b. mill pricing will accelerate the tendency to regionalize primary production facilities can be plainly seen. Nonetheless, to expect the adjustment to occur overnight is to replace reason with hysteria. Particularly is this the case with reference to the Western area. No reallocation of facilities has been forced in any area of the United States to date because of the large demands for both steel and cement since the basing point system was abandoned. It is extremely fortunate that this change over was

made in a period of above average demand. The locational adjustments which must be made can now be made more gradually and with less ill effect than would have been the case in a period of lower demand. If the present high rate of steel consumption continues, it is very possible that adequate return on investment, made in areas which will be surplus under f.o.b. mill pricing, can be secured.1

The Geneva Plant seems to be in a completely secure position as regards possible reallocation of facilities. It is supplying a deficit steel producing area which, because of the nature of raw material location, will in all probability continue to be a deficit steel producing area in the future. In addition, the Geneva Plant was not built with an eye to the delivered pricing system, although in all fairness it should be said that its location probably would have been the same if it had been. The Geneva Plant was, instead, built to minimize assembly costs of raw materials, near adequate raw material supplies, and at a point where it would be relatively secure from possible enemy attack in wartime.

It seems unlikely that reallocation of the Geneva facilities would take place in the near future even if it were economically justified, which it certainly is not. First because the investment of the present owners is only a fraction of the construction cost. Second, because it would

be extremely costly to move these facilities. These considerations are of academic interest only since the Geneva Plant will be favorably located under the new pricing system.

Since f.o.b. mill pricing will provide incentive for steel consumers to locate in areas of surplus steel production, and for new steel producing plants to locate in deficit producing areas, the State of Utah and the Geneva Plant will both benefit under the changed system. This is because the State itself is a surplus area in steel production, while the area served by the Geneva Plant is a deficit steel producing area. It would be a mistake, however, to expect any mass migration of fabrication plants to this area as a result of the changed pricing policy. The preponderance of demand for fabricated products in the West is in the Pacific Coast States. Because of the concentration of demand there, and the small amount of demand, by comparison, in the inland Western region, it seems likely that in the future, as in the past, fabricators will continue to locate as near their market outlets as possible, i.e., on the Pacific Coast. The most obvious reason, of course, is because in a vast majority of cases, the freight rates on the finished product are significantly higher than the rates on the steel used as raw material. (For example, rates on sheet steel are much lower than rates on finished refrigerators.) It might be that in some particular cases, the weight lost in the fabricating process is enough to overcome this difference in rates between steel as a raw material and the finished fabricated product, and if this
were true, the existence of comparatively low prices at the Geneva Mill would be an incentive to locating in this area. It must be recognized, however, that this would be an unusual situation, and that the freight differential would be one of higher freight on finished products in nearly all cases.

One other possible consideration is a fabricating industry in the West which served a market which was not concentrated on the Pacific Coast. If such an industry existed, it would be to the advantage of the owners to locate where the costs of procuring the raw material were least. In the Western United States, this would mean locating near the Geneva Plant. By doing this, the producers in this industry could serve a wider market, geographically, than could producers located at any other point. Here again, however, the situation would be exceptional, and for the overwhelming majority of fabricating industries in the Western United States, the market is concentrated in the Pacific Coast States.

There is one other possible outcome of the change to f.o.b. mill pricing with reference to location of steel producing facilities. This possible locational effect arises from the fact that there are many types of steel products, particularly certain steel alloys, which are not produced in the West. Under the basing point system, these items were

1. Economic Institute, Delivered Pricing and the Future of American Business, U.S. Chamber of Commerce, (Washington, 1948), p. 162. Mr. F.B. Delong, Vice President in Charge of Sales, Columbia Steel Company, stated at the meeting of the Industrial Plant Location Committee of the California State Chamber of Commerce, that 35% of the steel consumed in the West comes from the East. Unquestionably, some of the steel consumed was of types not produced in the West.
supplied to Western consumers on an Eastern-basing-point-plus-freight basis. Under uniform f.o.b. mill pricing, they must be supplied on an f.o.b.-producing-point-plus-freight basis. Any freight absorption which may have occurred on the shipment of these items under the basing point system is not possible under uniform f.o.b. mill pricing. In the absence of the basing point system, there is additional incentive for new companies to construct new facilities, or to add to existing plants the facilities for the production of steel products not formerly produced in this area. If a new company, or an existing company, decided to construct facilities for production of some of these items, they could be relatively certain that the price for the same product from Eastern production centers would be comparatively high. This would be because of the transportation costs from the East or Mid-west to the Far West. Thus, if the new company, or old company with new facilities, had high production costs for the first several years, they could still be comparatively certain that their market would not be invaded by Eastern producers because of the freight difference. Such invasion was, of course, possible under the basing point system on a freight absorption basis. It should be borne in mind, however, that in no case can the price charged by the Western producer be higher than the Eastern price plus freight from the East since the Eastern producers could invade the market if this were the case. It is apparent
that the price to Western consumers of steel produced in the East or Mid-west exclusively at present, might be higher by the amount of freight absorption carried on while the basing point was in use, but the potential long-range effect is the establishment of facilities in the West for the production of these items, and ultimately lower prices. The favorable combination of resources in Utah make it a likely spot for future construction of these added facilities.
LOCAL MONOPOLY

The argument most frequently used by advocates of the basing point system is that its abolition will make possible a situation where every isolated producer can charge relatively higher prices to those consumers located near his plant. This is possible, it is argued, because each mill will be protected by a wall of freight rates from competition by more distant sellers.¹ This, of course, would be a very undesirable development since it would constitute a reduction in competition among producers. Therefore, the argument runs, the elimination of basing point pricing does not make for competition in the steel industry, but will have quite the opposite effect. It creates a series of local monopolies.

This argument overlooks many significant considerations. In the first place, the steel industry has in past years been characterized by long periods of excess capacity. Thus, during the 1920's, the utilization of capacity averaged only 71.6 per cent. During the decade of the 1930's, this figure fell to 48.3 per cent, and as late as 1946, only 72.5 per cent was being utilized although this figure has risen to near 100 per cent since that time.² Thus, in the past, there has

1. In an interview with J.A. Wood, Vice-President in Charge of Sales of the Utah Idaho Sugar Company, this argument was the one principle used to support the existence of basing point pricing in the sugar industry. cf. also, T.N.E.C. Monograph 42, p. 82.
usually been a significant amount of pressure on the average steel producer to expand his sales in an effort to utilize his capacity more effectively. If this condition of excess capacity returns in the future, and it certainly has an excellent chance of doing so, the individual producer will again be anxious to expand sales and utilize his capacity to the greatest extent possible under the conditions of the future market. Even if he is a comparatively isolated producer, he will attempt to expand his sales area if he is faced with excess capacity. The only way the sales area can be expanded under an f.o.b. mill pricing system is for the producer to lower his prices by an amount sufficient to attract buyers from the periphery of a rival sellers market territory. If this is done, the local consumers will share in the price reduction extended to the distant consumers and the effect will be that although the isolated producer in fact does have a monopoly in the immediately adjacent market area, the price to these consumers might very well be lower than those which would obtain under the basing point system.

If, on the other hand, the isolated mill is located in an area which is deficient in steel production facilities so that the immediately surrounding area more than consumes the output of this isolated mill, there will be no pressure on this seller to lower his prices and expand his markets. Under these conditions, the local consumer might honestly
be at the mercy of the only producer in the area. Even if this situation occurs, it is still possible that steel prices will be as low or lower than under the basing point system because of decreased costs in transportation due to the elimination of cross-hauling and the disappearance of non-base mills.\(^1\) It is conceivable that being at the mercy of one mill might be preferable to being at the mercy of a whole industry united in one price.\(^2\) If the isolated mill did, however, fix its prices to the local consumers at a very high level, this should be only a temporary condition. If this isolated mill continued to make unusual profits over any considerable period, other producers would certainly be attracted to this area, and in time, the price would fall to a more reasonable level. It should be recognized that the large investment necessary for steel production might delay this adjustment for some time, however.

The Geneva Plant quite definitely falls into the first of these two possible situations. The Geneva Plant is comparatively isolated geographically, and does not have anything approaching sufficient demand in the local market to allow near capacity operations. It would be ridiculous, therefore, to argue that the new pricing system has put the local consumers at the mercy of the Geneva Plant in the matter of prices. If the management of the Geneva Plant attempted to

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raise their prices to the local buyers, and consequently to the Pacific Coast buyers, the plant would lose a great deal of its Pacific Coast market either to producers on the Pacific Coast or to Eastern Seaboard producers. Selling to buyers on the Pacific Coast at a price below the price to local buyers plus freight to the Coast is forbidden by section 2 of the Clayton Act as amended by the Robinson-Patman Act, as being price discrimination injurious to competition. Therefore, the local consumers must participate in any price concessions to Pacific Coast consumers. Of course, there is always the possibility that the producers who supply the Western market might fix prices in concert, but even if this occurred, there is no reason to believe that the resultant price would be at a higher level than the basing point price. Also, this could scarcely be considered as being the result of the abolition of the basing point system. Contrary to the effect of creating a local monopoly in every isolated steel producing area, the adoption of f.o.b. mill pricing will have the effect in most areas of guaranteeing the local buyers against monopoly pricing. Certainly, it appears that this will be the outcome in Utah.
THE EFFECT ON PRICES

There are several reasons to suspect that the abolition of the basing point system will not bring with it price competition in the steel industry, either in the West or elsewhere. The first of these reasons is that the demand for steel is probably relatively inelastic, which means that no significant expansion of markets is possible as the result of industry-wide price cuts. This inelasticity of demand for steel products probably results in part from the fact that these products are usually used for further production. That is, most steel demand is derived or secondary demand. At least this seems to be the case with the products produced at the Geneva Plant. Steel is also characterized by a lack of substitutes and there are not many things for which steel can be substituted. This means that price cuts in steel will result in only a minor increase in the amount demanded for substitution in many cases.

The amount of steel contained as raw material in a finished product is, of course, of primary significance in determining the elasticity of demand of a particular buyer who uses it in further production. Generally speaking, the proportion of the total cost to the cost of the steel in the finished product will vary inversely with the buyers elasticity of demand. Thus, if the cost of steel is a minor part of the total costs, the demand is likely to be less elastic than would be the case if steel costs were a large part of
the total costs. If an average price per pound of 3.50 cents for all steel products is assumed, the following is a list of the total cost of steel used in some rather common articles. The approximate cost of the steel in an electric refrigerator is $6.02; in a typical passenger automobile, $124.04; in a typical farm tractor, $54.00; in a modern six room house, $296.87; and in a railroad freight car, $1610.00. It can be seen from this very incomplete list, that the elasticity of demand for various producers of goods in which steel is used as a raw material might be subject to rather wide variation as the result of the relative importance of the cost of steel to the total costs.

For the purposes of this analysis, however, it may be of more significance to ascertain the effects of a change in the price of steel on the costs of producing commodities which use it as a raw material. It is in this connection that the relative unimportance of steel price changes to many consumers can be most clearly seen. For example:

"...under 1948 conditions, a $5 per ton change in the price of all steel products going into a $1,500 automobile would affect the cost of producing the automobile about $8; a $20 electric toaster would be affected by less than one cent; a $285 electric refrigerator by

1. To arrive at the approximate price of steel per pound, prices of selected steel products per ton were taken from: "Basic Data Relating to Steel Prices," 81 Cong. 2nd Sess. Published by the Joint Committee, (Washington, 1950), pp. 11-16-31. These figures were divided through by the number of commodities and this figure was then divided by one ton to get the approximate price per ton. This price was then multiplied by the number of pounds of steel used in the various products to determine the approximate cost of the steel used in each. No attempt has been made to include freight costs or extras. In some cases these might make a considerable difference in the final cost of the steel used.
For some other things in which more steel is used the affect of a price change would be greater but in almost every case, the affect of a price change in steel on the total cost of the commodity is comparatively small when compared with the final sale price.

In addition to the inelasticity of demand for steel, the industry is characterized by a high degree of concentration. A study of annual steel capacities as of January 1, 1948, showed that the twelve largest steel companies controlled 83.69 per cent of the output of steel ingots, 88.18 per cent of pig iron capacity, and 82.66 per cent of the facilities for finished hot-rolled steel. The situation in the Western steel market is one of even more concentration with one company, the United States Steel Corporation, controlling 39 per cent of all steel capacity and 51 per cent of the capacity for steel ingots. Add to the capacity in the West owned by the United States Steel Corporation that owned by the Bethlehem Steel Corporation and the Kaiser Steel Company, and practically all steel capacity in the West is accounted for. There are some small independent producers in the West but they are dwarfed by comparison with the three big companies.

4. Sullivan Letter; Mahoney, op. cit., Part I, p. 71. The Colorado Fuel and Iron Company Plant at Pueblo is omitted because it does not serve the same general market as the above mentioned companies.
The Western steel industry is an excellent example of an oligopolistic industry. There are a few sellers of a homogeneous product, and every seller must consider the action of all other sellers when he changes his price. (See fig. 11). This makes steel prices "sticky" and given to less frequent changes than would be the case if the steel market were competitive. It can be shown that in the past, steel prices have fluctuated relatively less than steel output and employment. (See fig. 12). Also, that steel prices have tended to fluctuate relatively less than prices of commodities produced in industries characterized by a smaller degree of centralization of control. (See fig. 13). These characteristics of the steel industry must be considered when an analysis of the effect of a new pricing policy is attempted.

When the basing point system was abandoned in July, 1947, the immediate effect was an increase in price. Most writers on the subject agree that many mills had set their base prices under the basing point system at a level high enough to allow for some freight absorption.  

1 If this were the case, then the logical outcome of abandoning the delivered pricing system should have been to lower the f.o.b. mill prices by the amount of the cost decrease occasioned by the

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"OLIGOPOLY: Partial control over a commodity price by a few sellers acting to some extent as a group. Each seller asks himself what will be the effect of his action on the behavior of the other sellers. If the product is homogeneous, a price cut by one seller may result in price cuts by the others. ...Under oligopoly, output does not respond immediately to shifts in the marginal cost curve as in the case of monopolistic competition where each firm disregards the action of other firms..." Byrne J. Horton, Julien Ripley, and M. B. Schnapper, Dictionary of Modern Economics, (Washington, 1948) p. 245.

The line $D_XX^1$, represents the characteristic demand curve for a firm operating in an oligopolistic market. The segment $D_X$, is relatively elastic, the segment $X^1D^1$, is relatively inelastic. The price under the above illustrated conditions would be at point $P$, and the amount demanded, at point $Q$. The kink in the demand curve arises from the fact that if the producer raises his price, it is likely that the other producers will not follow the price increase. Thus, if he raises his price, he does so on the elastic segment of his demand curve. This means that his total receipts move in the opposite direction from the price. On the other hand, if he lowers his price, he expects the other producers who share his market to lower their prices by an even greater amount so that his reduction in price will result in a less than proportional increase in the number of units he can sell. This is tantamount to saying that if he lowers his price, he does so on the inelastic segment of his demand curve. If this is the case, his total receipts will now move in the same direction as his price, or down. Thus, it is easily seen, that given the above conditions, the individual producer can maximize his total receipts only at the point where the other firms in his market area have set the price, at the point where the demand curve is kinked. The price tends to be "sticky" at this point.

The contention is, that under the basing point system of pricing, this type demand curve for the individual producer seems likely to occur. Using basing points, retaliatory action against a price cutter is relatively simple through the medium of designating his plant as a punitive basing point. On the other hand, since every will quotes identical prices to any given buyer, an attempt by one buyer to raise his price above the prevailing basing point price is futile since the buyer has simply to switch to another supplier at the old lower price.

FIGURE 11
Steel Prices and Production 1929-1941

Price Index: 1936-1939 = 100
Production Index: 1936-1939 = 100
Source: The Iron Age
Source: The American Iron Steel Institute

FIGURE 12
Steel and Other Commodities: Price Movements

1926-100

Iron and Steel

Farm Products

Textiles

Statistical sources: U.S. Department of Labor, Index of Wholesale Prices

FIGURE 13
elimination of net freight absorption. Not only did this fail to happen, but many mills raised their prices and implied that higher prices and higher mill realizations were now required by law. The obvious purpose of this action was to convince the buyers of steel, and the public in general, that it was to their best interests to oppose the abandonment of the basing point system. Also, the price increase was long overdue since steel prices had not changed since the War and the prices of nearly all other commodities, including those which used steel as a basic raw material, had gone up by various amounts. The demand for steel at this time was in excess of supply. According to one writer, the price rise was part of a vigorous campaign to get Congress to amend the law and legalize basing point pricing.

The Geneva Plant, in line with the general policy in the steel industry, raised its prices when the change over to f.o.b. mill pricing was made. It would be difficult, if not impossible, to say whether or not the price of Geneva products under the basing point system had been high enough to allow for some net freight absorption. The mill had been operated as a private concern for a comparatively short time and the demand for steel had been in excess of the supply for the entire time Geneva was a basing point. On the one hand the distance from Geneva

1. Macklup, op. cit., p. 72.
2. Ibid., and many others.
4. Economic Institute, op. cit., p. 162. (Statement made by K.T. Norris, President, Norris Stamping and Manufacturing Company, a West Coast Firm.)
to the West Coast, which is an outlet for most Geneva products, would suggest that the base price at Geneva was set at a point which would allow for net freight absorption. On the other hand, however, the favorable position of the Geneva Plant with reference to raw materials as compared with the West Coast producers might suggest that the price could be set at Geneva without allowance for net freight absorption and still allow profitable operation. In any case, the price increased when the basing point system was abandoned. Considering the degree of concentration of control in the Western steel industry and the fact that at the time the change in pricing policy was made demand was in excess of capacity, it does not seem unreasonable to assume that the price increase on products produced at Geneva could very easily have been the result of considerations other than the geographical pricing policy. A factual study of the effect of the changed policy on the prices of steel produced at the Geneva Plant will have to wait until such time as the demand for steel declines and the sellers market for steel is gone.

The very conditions which make the price for steel sticky and subject to infrequent changes, can in the absence of control or co-operation among the producers, give rise to the opposite effect. The fact that steel is used largely in further productive processes indicates that most purchases
are made in rather large amounts by buyers who are very well informed concerning steel prices. This might make the sales curve of the individual steel producer extremely elastic below the market price. (See fig. 14). The fear of retaliatory price cutting is a very important factor in making the price for steel inflexible. (That is, if there is no control or co-operation among the producers.) It follows then, that any price policy which made the possibility of retaliatory price cutting less likely would provide an incentive to lower prices. This would be particularly true if the demand for steel were such that only a fraction of producing capacity were being utilized. The basing point system almost certainly centralized control, and made retaliatory action a comparatively simple matter. If a mill cut prices below the established basing point price, it was comparatively easy for the rest of the producers to make this mill a punitive basing point with lower-than-cost prices. With this arrangement, all other mills would sell in the price-cutting mill's market territory at less than cost without much harm to themselves since no one mill would be selling any large percentage of its products in this area. The price-cutter, on the other hand would be forced to sell in his own territory at the reduced price or in other market areas on

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1. Smithies, Fetter, Edwards, Pegrum, Machlup, and nearly all other economists and some businessmen who have written on the subject agree that this is the case. (All above authors' works on this topic have been cited previously in this paper.)
Assuming a market served by a few sellers of a homogenous product, but in which the individual seller is not afraid of price retaliation. Assuming further, that in this market, there is no collusion, either overt or tacit, among the sellers. Also, in this market, the buyers of the product are for the most part purchasing for further productive uses, and purchasing the product on a comparatively large scale. In other words, assuming that the buyers are well informed as to the prices quoted by the various producers serving the market in question.

Given the above market conditions, the individual producer could greatly expand his output by lowering his price below \( P \), the price of the other sellers serving this particular market area. Since the seller does not expect retaliation in the form of further price cuts by his principal competitors, he can lower his price and greatly expand his sales. The principal reason the individual seller in the above market illustration would be faced with a relatively elastic demand curve below the price point \( X \), is the fact that the buyers he supplies are very well informed as to the prices offered by all possible suppliers, and are buying in sufficient quantity to make even a comparatively small price change important. On the other hand, if this seller raised his price, he would be faced with a sharp reduction in the amount he could sell for the same reasons as he can increase his sales sharply below the market price.

The contention is, that this type of demand curve for the individual producer has a better chance to occur in the absence of the basing point system than if this system is being used. This should not be construed to mean that this type demand curve will be the inevitable outcome of the adoption of f.o.b. mill pricing. On the contrary, this seems rather unlikely. The inherent instability of a market situation such as that illustrated above should be recognized. Every producer in the hypothetical market is faced with this type demand curve, hence, every producer has incentive to lower his price below the prevailing price. This could very easily lead to ruinous competition which, it seems likely, would ultimate in some sort of collusion among the sellers.

**FIGURE 14**
a freight absorption basis. Neither of these alternatives would be very inviting and the price-cutter would probably raise his price back up to the established level. Under an f.o.b. mill pricing system, however, retaliatory price cutting would not be so easy. If a certain mill's prices were lowered in its own market area, the only way retaliation could take place would be if mills located near this producer lowered their f.o.b. mill prices to a level so low that transportation costs to the price-cutter's territory plus their mill prices would be below the price set by the price-cutter. The retaliating mills could not keep prices in their own market territory up to the previous level since this would constitute price discrimination and would be clearly illegal under Section 2 of the Clayton Act as amended. Thus, the retaliating producers would find that they had chosen a very expensive course of action, and it is questionable whether retaliatory price cutting would occur. The proponents of the basing point system point out that the method of punitive action against a price-cutter described above was never used while the steel industry was pricing on a delivered basis. This seems to be the truth, but the fact that such action was possible would certainly discourage any contemplated price cuts. This analysis applies to the Western steel industry as well as to any other section of the United States.
It should be emphasized that price-cutting under the f.o.b. mill pricing system is just easier than it would be under a basing point system. This does not mean that price cuts will be the inevitable outgrowth of the new pricing arrangement. Price cuts will occur only where the steel producers are so situated that no producer in the same or very nearly the same area can retaliate. What is even more important, they will occur only if the producers in any area act independently instead or tacitly agreeing on a price policy in their area. The fact that Western steel capacity is highly concentrated in the hands of a few Eastern companies makes the probability that there will be widespread price cuts in the Western market more unlikely than would otherwise be the case.

Further impetus should be given to price reductions for steel products by the decentralizing effect of the new pricing policy as mentioned in a previous section of this paper.¹ If more independent plants are set up closer to the market outlets, the reduction in transportation costs as well as the added competitive influence should stimulate price reductions. Also, any excess costs involved in cross-hauling and use of other than the cheapest means of transportation should be eliminated and the resultant savings could be passed on in the form of lower prices. The seller could pass these cost reductions on to the consumer without a net change in the price he received. Thus, f.o.b. mill pricing should encourage price reductions because of savings in costs which would

¹ Supra, pp. 60-61.
result under the system. Whether this outcome will be real-
ized in the future remains to be seen, but it seems rather
obvious that uniform f.o.b. mill pricing provides a better
opportunity for low steel prices than would be the case
under a delivered pricing system.

Actually, when application of the above analysis is
made to the Geneva Plant, it becomes apparent that the effect
will be less than in many other areas and to many other plants.
The existence of such large capacities at the Geneva Plant
makes it unlikely that other plants will be encouraged to
locate in this immediate area for some time to come. Of
course, if the demand for steel on the Pacific Coast con-
tinues to grow at the rate experienced through the past few
years, some additional capacity will have to be added to the
Western steel industry in a comparatively short time. This
capacity might very well locate in Utah, but it would be
because of the proximity to raw materials rather than as a
result of a changed pricing policy.

The Geneva Plant will not experience any great saving
in costs as a result of the elimination of cross-hauling
since the amount of steel sold in Utah is very small. This
means that even if other producers invaded the Utah market,
the amount of wasteful cross-hauling would be of minor signif-
icance. Further, the Geneva Plant would probably not have
sold any significant amount in the Eastern or even Mid-Western
United States even if the basing point system were allowed. Thus, no wasteful cross-hauling would have occurred to and from these areas.

Finally, the absence of any large bodies of water between the Geneva Plant and its principal market outlets makes it extremely unlikely that much saving will accrue as the result of using cheaper transportation.

There is one other important effect on price which should be considered. That is that the local consumers will be guaranteed a share in any price cut to any part of a particular producer's market. For example, if the United States Steel Corporation had wished to lower the price of steel on the Pacific Coast while the basing point system was being used, they could have done one of two things. Either the base price at Geneva could have been lowered, or a new basing point for the products could have been established at one of the Columbia Steel Company Plants on the Coast. If the base prices at the Geneva Plant had been lowered, the steel consumers in Utah would have shared in the price reduction. If the other alternative had been followed, however, the price reduction could take place on the Coast without any price change occurring in the Utah market. Under the present pricing system, any reduction in prices of Geneva made products on the Coast must also be a reduction in the local market. Thus, the new pricing system guarantees the local consumer a share in any price decline which occurs on the
products of a particular plant.

One writer summed up the effect of the new policy with regard to competition and prices as follows:

"The difference between market competition under f.o.b. mill pricing (with strictly delineated market areas) and under discriminatory delivered pricing is something like the difference between trench warfare and guerilla warfare. In the former case, all fighting takes place along a definite battle line; in the second case, the opposing forces are intermingled over a broad area."  

SUMMARY AND CONCLUSIONS

Several considerations peculiar to the Geneva Plant condition the effects of the abolition of basing point pricing on this firm. One of the most important of these is the fact that the plant is so constructed that some change in the proportions of the final products is possible. That is, the steel ingots produced at the plant may be either made into structural shapes or into plate and thinner than plate gauges. Were it not for the possibility of changing the relative amounts of these two types of semi-finished steel products produced at the Geneva Plant, it seems likely that the change in pricing methods might occasion some curtailment of production. Western capacity for structural steel is, at present, more than adequate to meet the demand. Under the basing point system, this would cause the Western producers to seek markets outside of the Western area in which to dispose of their structural steel surplus. These outside markets would be served on a freight absorption basis. Of course, this is not possible under uniform f.o.b. mill pricing, and some capacity for the production of this type of semi-finished steel must lay idle. In the case of the Geneva Plant, this cut-back in the production of structural steel can be largely absorbed by increasing production of plate and thinner than plate steel. Therefore, as regards the structural mill, it seems likely that the same policy is being followed under f.o.b. mill pricing as would have
been followed under the basing point system, i.e., production of structural steel has largely given way to production of the other types of semi-finished steel at the Geneva Plant.

The situation in the West with regard to plate and thinner than plate rolled steel is quite different from the structural situation. There seems to be demand for these types of semi-finished steel products sufficient to allow for effective utilization of existing Western capacity. The effect with reference to these steel products of the changed pricing system will likely, therefore, be quite different. In the first place, uniform f.o.b. mill pricing will eliminate the possibility of market penetration by some Eastern producers which would have been possible under the basing point system. Thus, the effect of the changed pricing policy in this case should be favorable to Western steel producers including the Geneva Plant.

The effect of abandoning the basing point system on the future location of steel producing facilities in this region will be conditioned by the fact that the Geneva Plant was constructed to serve wartime purposes and to fill an extremely large wartime demand. The capacities of the Geneva Plant, therefore, are more than adequate to supply demand which exists now or will probably exist for some time in the future. It is also extremely difficult to say what the effect on future location will be because of the large role played in determining location of steel mills by the availability and
extent of raw materials. It is conceivable that foreign sources will be discovered and developed which will allow production to be carried on at tidewater on the Pacific Coast at a cost which compares favorably with the costs of production at Geneva. Because the future is so uncertain in these respects, about all that can be said is that the abolition of the basing point system will likely have the effect of decentralizing future steel production, and Utah might conceivably be a location site for some of this decentralized steel capacity. Availability and extent of raw materials will be of more importance than the pricing system in determining this, however.

The concentration of market outlets for fabricated products on the Pacific Coast makes it extremely unlikely that the change in pricing systems will have any significant effect on fabrication plant location in the Western United States. The fact that the freight costs on the finished product are generally much higher than those on the steel which goes into the product as a raw material, makes it profitable, in a preponderance of cases, for the fabricator to locate as near as possible to his market. It seems unlikely that the change in pricing methods will have enough effect to make location away from the market more profitable, particularly in the West where the market is so highly concentrated.

The location of the Geneva Plant with reference to its principal markets makes it virtually impossible for the local
steel consumers to be charged a local monopoly price which is higher than the price which would prevail if the basing point system were in use. To raise the price to the local steel consumers under the present uniform f.o.b. mill pricing system would mean that the price to the rest, and in the case of the Geneva Plant the vastly greater part of the market, would have to be raised as well since federal law prohibits discrimination in price between two market areas or consumers. Since the Geneva Plant will be competing with several producers on the West Coast, it is a virtual impossibility that this will occur.

It is with reference to future steel prices that the changed pricing policy might well have some significant effects, both in Utah and elsewhere. In the first place, the decentralizing effect of the new pricing method should introduce elements of competition into the sale of steel which might not otherwise be present. The fact that the buyers of steel will now be faced with alternative prices from different producers, whereas they were faced with a single price under the basing point system, should stimulate some price competition which did not previously exist. The possibility of a steel producer expanding the area of his sales by price reductions, and the fact that uniform f.o.b. mill pricing makes price retaliation more difficult should add to the possibility of more competition in price. It should not be presumed that the adoption of f.o.b. mill
pricing by the steel industry will automatically make this a competitive industry, however. Too many other considerations are present. The industry is not competitive in its very structure, and a change in geographical price policy will certainly not alter this. It would also be an error to assume that the change to f.o.b. mill pricing will automatically result in lower steel prices. Here again, other considerations might be paramount. There is, however, reason to believe that the change to f.o.b. mill pricing will have the effect of encouraging competition in price, and what is equally important, encouraging price flexibility.

Probably the most important conclusion to be drawn from this study is that it seems very unlikely that the results of the change in pricing method will be world-shaking. This is not to say that there will be no effects, but that the results in the area under study will in all probability be less significant or pronounced than was widely anticipated. Perhaps this situation is peculiar to this area and in other areas, it might be that the more important effects predicted by writers on the subject will occur. It may be also, that the occurrence of the change in pricing methods during a period of very high demand, both for steel and for fabricated goods, has softened the effects; had the change occurred in a period of weaker demand, the predictions of the majority of writers on the subject would have been borne out. Or, it may be, that the conclusions arrived at in this
study will prove to be too underestimated. Only after enough time has elapsed to enable some empirical studies to be made, will the final word be said.
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COURT DECISIONS


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LETTERS

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INTERVIEW