A Method for Analyzing the Effect of Competition on Restricting Imports

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I. INTRODUCTION

The President is authorized, pursuant to Section 203 of the Trade Act of 1974, to restrict imports of a commodity when these imports are the principal cause of injury to United States firms producing the same article.¹ In such an "escape clause" proceeding, the President is to take into account, inter alia, "the effect of import relief on consumers . . . and on competition in the domestic markets for such articles."²

The International Trade Commission (ITC) makes an initial determination on whether the industry is being injured by imports.³ In making its injury determination, the ITC shall consider all "relevant" economic factors concerning the United States industry, including idle productive facilities, profits, employment, sales, inventories and production.⁴ If the ITC finds injury, it recommends relief to the President which may take the form of import quotas.⁵

While the President considers the effect of relief on competition,⁶ the ITC may have made, at best, a perfunctory analysis of the effect on competition of restricting imports. For example, the ITC in its 1979

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³ "The Commission shall . . . determine whether an article is being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing an article like or directly competitive with the imported article." 19 U.S.C. § 2551(b)(1) (1976).
report on whether to continue import quotas on specialty steel simply referred to a staff report which discussed the effect on consumers, and yet ignored the effect on competition. This lacuna in the ITC's report makes it difficult for the President, who must act within sixty days of receiving the ITC's report, to adhere to the statutory requirement to consider the proposed relief's effect on competition.

The ITC's failure to assess the effect on competition may be due, in part, to the lack of a simple method for making such an assessment. Simplicity is important because of the limited time—six months—within which the ITC must complete its investigation. With this in mind, I propose a two-step procedure to be used in making injury determinations. For the first step, I propose a simple analytical method for making an initial assessment of the effect on competition of restricting imports: the use of the Hirschman-Herfindahl Index (HHI). The simplicity of this tool would ensure its use in each determination, thus satisfying the statutory mandate that attention be paid in such determinations to the impact on competition. Further, if the finding is within the safe range of the HHI, such a finding would be dispositive of the issue. If, on the other hand, the finding is not within the safe range, the ITC would be alerted at an early stage in the proceedings that further attention will be required. The second step, a more detailed analysis of the effect on competition, would be mandated only when a potentially serious problem becomes apparent through the application of the HHI.

In this brief Perspective, I will explain why the HHI would be an appropriate tool for the first step of the determination and illustrate its application by using public data about various types of specialty steel.

II. Calculating the Effect on Competition

Restricting imports has an adverse effect on consumers, at least in the short run, because it leads to a price increase in the domestic good that competes with the import. The price increase resulting from a

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7 Stainless Steel and Alloy Tool Steel, No. TA-203-5, USITC Publication 968, Apr. 1979, at A-65-66. The law does not specifically require the ITC to consider the effect on competition when it considers whether to recommend the initiation of import restrictions, but the ITC shall consider all relevant economic factors. 19 U.S.C. § 2551(b)(2) (1976).
11 It is possible that a temporary flow of cheap imports could injure consumers in the long run by destroying an efficient domestic industry. For an economic analysis of such "predatory conduct," see R. BALDWIN, NONTARIFF DISTORTIONS OF INTERNATIONAL TRADE 141-43 (1970); R. DALE, ANTI-DUMPING LAW IN A LIBERAL TRADE ORDER 28-34 (1980).
particular reduction in the quantity of imports depends both on the amount by which imports are reduced and on the level of competition in the domestic industry. The increase in the domestic price associated with a reduction in imports via import quotas will be more acute in an industry with few domestic producers than in a competitive domestic industry.12

Restricting imports into the United States reduces the number of independent sources of supply. This is similar to the effect of a merger of competing firms.13 Analyzing the economic effects of a merger is not an easy task. The Department of Justice (DOJ), however, has recently announced that it will use the HHI in analyzing proposed mergers.14 The DOJ stated that concentration—the number of firms in the market and their respective markets shares—affects the likelihood that one firm, or a small group of firms, could successfully exercise market power (i.e., maintain prices above competitive levels for a significant period of time).15 The DOJ added that the HHI is superior to the traditional four-firm concentration ratio test, because the HHI “reflects both the distribution of the market shares of the top four firms and the composition of the market outside the top four firms [and] gives proportionately greater weight to the market shares of the larger firms, which probably accords with their relative importance in any collusive interaction.”16 These factors would be equally relevant in assessing changes in concentration resulting from a restriction on imports.

The HHI is calculated by summing the squares of the market shares of all the firms included in the market. For example, an industry with three firms with market shares of forty percent, thirty-five percent, and twenty-five percent has an HHI of 3450 ($40^2 + 35^2 + 25^2 = 3450$). The HHI ranges from 10,000 (in the case of pure monopoly) to a number approaching zero (in the case of an atomistic market). The DOJ has stated that for a post-merger HHI below 1000, the DOJ “is unlikely to challenge mergers”; for a post-merger HHI between 1000

12 A potential domestic monopolist protected by a tariff can not raise its price above the world price plus the tariff. A potential domestic monopolist protected by a quota can, however, raise its price to its profit-maximizing level without fear of additional imports beyond the quota level. For a technical exposition of this point, see C.P. Kindleberger, International Economics 130-34 (1968).
15 Id. at 11.
16 Id. at 11-12.
and 1800, the DOJ "is more likely than not to challenge mergers that produce an increase in the HHI of more than 100 points"; and for a post-merger HHI above 1800, the DOJ "is likely to challenge mergers that produce an increase in the HHI of 100 points or more."\(^7\)

Consider the following example. Suppose there are five United States producers of a product with each firm producing twenty units. Suppose further that there is only one foreign firm selling in the United States and that it sells forty units in the United States. Assuming no United States exports, United States consumption is 140 units. Eliminating the foreign firm from the United States market and assuming that its United States sales are distributed among the United States firms in proportion to their output in the United States gives the following results:

<table>
<thead>
<tr>
<th>Approximate Percentage Share of the U.S. Market</th>
<th>With imports</th>
<th>With no imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm A</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Firm B</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Firm C</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Firm D</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Firm E</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Imports</td>
<td>29</td>
<td>0</td>
</tr>
</tbody>
</table>

Thus, the HHI increases from 1831 to 2000 if imports are eliminated. A merger leading to such an increase would probably be challenged by the DOJ.

Is there any economic reason for applying a different quantitative standard when imports are eliminated through quotas than when a firm is eliminated through a merger? A merger is frequently justified on the grounds that it will lead to lower costs than if the two firms remain separate and that it is socially wasteful to have one of the firms build additional capacity. A similar justification can be made for refusing to restrict imports, because less efficient domestic firms must expand when imports are restricted. A lenient merger policy is also justified on the ground that it provides a check on the performance of potential merger targets' management. Again, such logic would dictate that imports not be restricted in situations where a merger would not be appropriate. Thus, an increase in the HHI that would be cause for antitrust concerns

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\(^7\) Id. at 13. The Federal Trade Commission has stated that it will give "considerable weight" to the DOJ's Merger Guidelines. Statement of Federal Trade Commission Concerning Horizontal Mergers 1 (June 14, 1982).
if it stemmed from a merger would, a fortiori, be cause for concern if it stemmed from a restriction on imports.

III. An Illustration of the HHI in Use

This technique may be illustrated by using public data on two types of specialty steel: tool steel bars and rods, and stainless steel wire rods. In 1980, there were fifteen United States producers of tool steel bars and rods.\(^\text{18}\) Seven United States firms accounted for approximately seventy percent of United States production in 1981.\(^\text{19}\) Total United States production in 1981 was 67,000 tons.\(^\text{20}\) Total imports in 1981 were 27,000 tons,\(^\text{21}\) coming mainly from eight countries.\(^\text{22}\) Assuming that the seven largest United States firms are of equal size and that the eight smallest United States firms are of equal size,\(^\text{23}\) and assuming that in each foreign country only one firm exports to the United States,\(^\text{24}\) one can estimate the 1981 HHI including imports. If imports are eliminated and if the United States firms divide up United States consumption in proportion to their share of United States production, one can estimate the HHI absent imports. The HHI increases from 557 to 828, which would not trigger antitrust concerns under the DOJ guidelines, and so there would be no need for the ITC to devote additional resources to an examination of the effect on competition of restricting imports.

Consider, on the other hand, stainless steel wire rod. In 1981, five United States firms produced stainless steel wire rod.\(^\text{25}\) Total United States production in 1981 was 31,000 tons.\(^\text{26}\) Imports in 1981 were 25,000 tons, primarily coming from six countries.\(^\text{27}\) Assuming that all United States firms are of equal size and that in each foreign country only one firm exports to the United States, one can estimate the 1981 HHI including imports. If imports are eliminated and if the United States firms divide up United States consumption in proportion to their

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\(^{19}\) Id. at A-23.

\(^{20}\) Id. at A-18.

\(^{21}\) Id. at A-31.

\(^{22}\) Id. at A-35.

\(^{23}\) This assumption leads to a lower estimate of the HHI.

\(^{24}\) This assumption leads to a higher estimate of the HHI including imports and so leads to an underestimate of the increase in the HHI due to an elimination of imports.

\(^{25}\) Hot-Rolled Stainless Steel Bar, Cold-Formed Stainless Steel Bar, and Stainless Steel Wire Rods from Spain, Nos. 701-TA-176, -177, & -178, USITC Publication 1254, June 1982, at A-11.

\(^{26}\) Id. at A-11.

\(^{27}\) Id. at A-64.
Restricting Imports
5:510(1983)

share of United States production, one can estimate the HHI absent imports. The HHI increases from 1188 to 2000, which would trigger antitrust concerns. The ITC might, therefore, refine its analysis of the effect on competition of restricting imports by examining such factors as: entry barriers; concentration trends (including the volatility of market shares); technological change; demand trends; market definition; the homogeneity (or fungibility) of products in the market; the number of buyers (as well as sellers); the similarity of producers’ costs; and the history of inter-firm behavior, including any evidence of previous price fixing by the firms at issue. In addition, the ITC could ask the Federal Trade Commission or the DOJ for help in making a more sophisticated antitrust analysis in those cases where the ITC’s preliminary HHI analysis suggests possible competitive concerns if imports are restricted.

IV. CONCLUSION

These calculations might also be used by the ITC in its other investigations. A finding by the ITC that there have been unfair methods of competition and unfair acts while importing goods can lead to a recommendation to the President that the imports be banned or that a cease and desist order be imposed after considering the effect of such relief on the United States economy. While the countervailing duty and antidumping statutes do not mention competition, they do instruct the ITC to “evaluate all relevant economic factors which have a bearing on the state of the industry.” Moreover, the ITC’s rules state that it will take into account “trade restrictive practices of and competition between the foreign and domestic producers.”

The ITC staff, having access to confidential data on production by each United States firm and on sales in the United States by each foreign firm, could do a more sophisticated calculation of the HHI. It could also estimate the HHI resulting from any specified level of imports from different countries. These calculations, which can be

28 See generally Statement of Federal Trade Commission Concerning Horizontal Mergers (June 14, 1982).
32 19 C.F.R. § 207.27 (1982).
33 At the request of the Federal Trade Commission, the ITC calculated the changes in the HHI for four carbon steel products in the recent countervailing duty investigations of carbon steel products imported from the European Economic Community. See the letter from ITC Chairman Eckes, Aug. 17, 1982, to FTC Chairman Miller (a copy of this source is on file in the offices of the Northwestern Journal of International Law & Business).
quickly done, might help the ITC—and ultimately the President in “escape clause” and “unfair methods of competition” cases—to decide whether additional efforts should be made to determine the effect on competition of restricting imports.