# St. John's Law Review

Volume 44 Number 5 *Volume 44, Spring 1970, Special Edition* 

Article 29

December 2012

# Anticompetitive Effects of the FTC's Attack on Product-Extension Mergers

James M. Ferguson

Follow this and additional works at: https://scholarship.law.stjohns.edu/lawreview

## **Recommended Citation**

Ferguson, James M. (1970) "Anticompetitive Effects of the FTC's Attack on Product-Extension Mergers," *St. John's Law Review*. Vol. 44 : No. 5 , Article 29. Available at: https://scholarship.law.stjohns.edu/lawreview/vol44/iss5/29

This Symposium is brought to you for free and open access by the Journals at St. John's Law Scholarship Repository. It has been accepted for inclusion in St. John's Law Review by an authorized editor of St. John's Law Scholarship Repository. For more information, please contact selbyc@stjohns.edu.

## **ANTICOMPETITIVE EFFECTS OF THE FTC'S** ATTACK ON PRODUCT-EXTENSION MERGERS

**JAMES M. FERGUSON\*** 

#### INTRODUCTION

This paper will consider the important economic issues in the application of section 7 of the Clayton Act to conglomerate product-extension mergers,<sup>1</sup> Product-extension mergers are important since they account for 50.4 percent of the acquisitions of manufacturing and mining firms with assets of \$10 million or more over the period 1948-1968; and the annual rate of acquisitions of manufacturing and mining firms with assets of \$10 million or more has more than doubled in the last five years.<sup>2</sup> There were 69 acquisitions in 1963, 101 in 1966, and an estimated 193 in 1968.8

#### THE FTC'S POSITION

The Federal Trade Commission (FTC) has attacked product-extension mergers and found them illegal in two leading cases - FTC v. Procter & Gamble Co.,4 and General Foods Corp. v. FTC.5 This paper considers the most important arguments made by the FTC and excludes the treatment of the issues by the courts. This limited scope is due to my belief that sensible enforcement of the anitrust laws depends on correct understanding of the basic economic issues by the FTC (and by the Justice Department). The courts cannot be expected to provide the necessary economic analysis, nor to

<sup>\*</sup> Professor of Associate Business, College of Business Administration, The University of Rochester. A.B., Stanford University, 1958; Ph.D., University of Chicago, 1962. Member of the Center for Research in Government Policy and Business. The author acknowledges helpful comments from Professors Walter Y. Oi and Michael C. Jensen. This research was supported in part by a grant from the Relm Foundation.

<sup>&</sup>lt;sup>1</sup> Amended, section 7 states in part:

No corporation engaged in commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital and no corporation subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of another corporation engaged also in commerce, where in any line of commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.

Clayton Act § 7, 15 U.S.C. § 18 (1964), formerly ch. 25, § 7, 38 Stat. 731 (1914). Product-extension mergers involve products which are functionally closely related and which may permit significant integration in production and distribution activities. Integration in marketing is especially likely where the products of the firms are sold to the same customers, or through the same outlets, or are actually complementary.

<sup>2</sup> BUREAU OF ECONOMICS, FTC, LARGE MERGERS IN MANUFACTURING AND MINING 1948-1968, at 7 (1969).

<sup>&</sup>lt;sup>8</sup> Id. at 6.

<sup>4 386</sup> U.S. 568 (1967).

<sup>5 386</sup> F.2d 936 (3d Cir. 1967), cert. denied, 391 U.S. 919 (1968).

discern economic sense from economic nonsense when there is an overwhelming quantity of the latter.

The primary economic argument of the FTC in both cases is that through mergers with much larger firms, Procter and Gamble and General Foods respectively (hereinafter P&G and G.F.), both Clorox and S.O.S. allegedly lower their costs due to economies of scale, thereby increasing their ability to dominate actual and potential rivals. The only alternative for smaller competitors is to merge with other giant companies or be eliminated.

In addition, the FTC argues that advertising in the household liquid bleach and household steel-wool soap pad markets is not socially useful for three reasons. First, advertising in these markets does not benefit consumers because the products are allegedly identical, and thus the advertising does not inform the consumer about real alternatives open to him. Second, extensive advertising creates and maintains strong consumer preferences for Clorox and S.O.S. which enable them to dominate smaller rivals. As a result, according to the FTC, the bleach and soap pad markets prior to the mergers were highly concentrated with advertising responsible for an almost total lack of price competition. Third, the economies of scale achieved by the mergers are allegedly due primarily to volume discounts in network television, which do not represent true efficiencies beneficial to consumers but are discriminatory prices granted to large advertisers. The FTC also argues that these mergers adversely affect potential competition which allegedly had exerted a significant competitive influence on prices in these markets. Thus, since these mergers increase the ability of the leading firms to dominate actual and potential rivals, and also are likely to increase the advertising of Clorox and S.O.S. due to economies of scale in advertising, they will impair price competition in these markets with no benefits to consumers and should therefore be prevented.

## Errors in the FTC's Position

If the FTC's factual assertions concerning the economies of scale resulting from product-extension mergers are correct, these mergers increase competition in the acquired firms' markets by increasing the number of firms with lowest attainable costs. Therefore, the FTC's conclusion that these mergers would harm competition is erroneous. If the FTC's factual assertions are incorrect — if there are no economies resulting from these mergers — then the FTC's attack on these mergers is also wrong because the mergers in no way enhance the ability of the acquired firms to dominate rivals. Examination of the evidence on economies of scale resulting from these mergers is necessary only to determine for which reason the FTC is in error.

#### Outline of the Paper

Section II analyzes the effects of product-extension mergers on competition and examines the evidence on economies resulting from these mergers. The errors in the FTC's argument are enumerated, assuming its view of the facts was correct. In addition, errors in the FTC's factual assertions concerning the amount of the cost savings resulting from these two mergers are considered.

Section III considers the additional argument made in these cases by the FTC, that advertising and the economies in advertising resulting from these two product-extension mergers are not socially useful.

Section IV offers a brief summary of the available evidence on the profitability of conglomerate mergers in our economy. This evidence provides insights into the size of the economies being realized through conglomerate mergers.

An appendix discusses the role of potential competition in these markets before and after the mergers.

INCREASING COMPETITION THROUGH PRODUCT-EXTENSION MERGERS

## A. Errors in the FTC's Argument Assuming There Are Economies of Scale Which Can Be Achieved Through Mergers

My Basic Argument: The FTC does not and cannot demonstrate anticompetitive effects due to economies resulting from product-extension mergers. Product-extension mergers permit more firms to exist in each consumer product market because the economies of large size are derived from sales in several markets. This argument can be illustrated with the following example.

Suppose there are a hundred consumer product industries in the economy, each with \$100 million in sales. Suppose further that there are constant returns to size in production and distribution but economies of scale in advertising, until the firm reaches a level of advertising which produces sales of \$100 million. In the absence of product-extension mergers, there will be only one firm in each industry or a total of one hundred firms each with sales of \$100 million. Thus, each industry will consist of one monopoly firm. However, if product-extension mergers are permitted, there can be a hundred firms which are divisions of conglomerates in each industry, each with \$1 million sales. Each conglomerate will operate a firm in each of the hundred markets and thus have total sales of \$100 million. I cannot see any reason for choosing a market structure with only one firm in each industry, but this is exactly the choice made by the FTC when it prohibits product-extension mergers. An antitrust policy in which fewer competitors in each market are preferred to more competitors when economies of large firm size are present is not in the public interest because it promotes inefficiency in the allocation of resources.

## 1. The Number of Bleach and Soap Pad Competitors

Suppose the FTC position is correct, *i.e.*, that the development of television has increased the economies of large size in national advertising, and that maximum efficiency in national advertising can only be achieved by consumer product firms such as P&G and G.F., which have sales larger than the entire industry sales of bleach and soap pads respectively. Thus, in the absence of these product-extension mergers, only one firm could exist in the bleach and soap pad markets. The only way other than merger for Clorox and S.O.S. to achieve greater economies of size is to grow larger in their respective markets. If mergers are forbidden, as the FTC advocates, the existing bleach and soap pad firms will struggle to control the entire market and thereby realize economies of large size in television advertising. During the struggle each firm will have higher advertising costs than they would have through merger. With these alleged economies of size, however, eventually one firm would grow larger, achieve lower costs, drive out the others, and attain a monopoly. Product-extension mergers are a more efficient means for small firms to attain economies of large size because firms like Clorox and S. O. S. attain these efficiencies immediately. Without mergers, these firms incur higher advertising costs throughout the interval in which they struggle to grow large and increase their market shares. Mergers are also a less costly means of achieving these economies of scale than having P&G or G.F. enter by building a new plant and fight for the monopoly position. Entry would involve additions to industry capacity, and the FTC recognized in both cases that there was no shortage of productive capacity. And the addition of unneeded capacity does not benefit consumers.

Given the increase in the economies of large firm size, the only possible way to ensure the existence of more than one strong competitor in each industry is to permit product-extension mergers in each industry. Through these mergers with larger firms in other markets, Clorox and S.O.S. could gain the economies of large size in advertising without having to increase their market shares in the bleach and soap pad markets. Therefore, the FTC reaches exactly the wrong conclusion in attacking these mergers in pursuit of its policy of maintaining existing competitors in these markets.<sup>6</sup> Furthermore, the FTC should welcome the merger of Purex with Brillo, which made available to both some of the alleged advantages of larger size in national advertising. The only way to maintain the existing number of firms in a small firm industry where there is an increase in the economies of large firm size is to permit every firm in the industry to merge with a firm in another market.

#### 2. The Number of Mergers

Is there any assurance that other firms in the bleach and soap pad markets will be acquired by other firms in related consumer product industries? The FTC apparently believes additional mergers would be very likely:

<sup>&</sup>lt;sup>6</sup> See General Foods Corp., [1965-1967 Transfer Binder] TRADE REG. REP. ¶ 17,465 (FTC 1966).

Furthermore, General Foods' merger had exactly the same consequence which we noted in our *Clorox* decision is an important anticompetitive result of mergers of this type, namely, that of motivating the remaining firms in the market to seek protection by affiliating by merger with companies larger than themselves . . . This was what we predicted would happen in *Clorox* and what actually did occur after General Foods' acquisition when Brillo merged with Purex.<sup>7</sup>

These mergers may at least ensure two national competitors in these markets instead of only one.

Under the conditions specified in the example discussed above, additional mergers would be profitable. The critical assumption in the example is that the only source of economies of scale was volume discounts in advertising media which can be earned either by large firms within the market or by large multi-market firms. If there are economies of scale which can be achieved only by increasing size within the market, such as economies of scale in national distribution of the specific product, then established firms in related consumer markets who acquire a smaller competitor in these markets will be at a cost disadvantage, at least until national distribution is achieved. Acquisitions of smaller competitors would thus be less likely because of a smaller expected profit, unless the acquiring firm felt it could expand sales into the national market and thus overcome the cost disadvantage resulting from regional distribution.<sup>8</sup>

B. Errors in the FTC's Factual Assertions on Economies Achieved by the Mergers

#### 1. The Evidence on Economies in Advertising

What were the estimated savings in advertising realized by Clorox after the merger? The question is a difficult one because different figures were presented by the hearing examiner and the FTC. For some part of the period July 1, 1957 to June 30, 1958, savings in advertising costs to Clorox amounted to about \$138,500 — \$86,000 being savings in the costs of spot television (about 7.5 percent of Clorox's estimated expenditures in spot television in 1957).<sup>9</sup> The total savings were less than 3.5 percent of Clorox's advertising budget.<sup>10</sup> However, the FTC states: "With Clorox now a part of the Procter line, for the same amount of money Clorox spent on network television advertising prior to the merger, at least 331/3 percent more network television advertising can now be obtained."<sup>11</sup>

9 Procter & Gamble Co., No. 6901, at 44 (FTC Feb. 28, 1962).

<sup>7</sup> Id. at 22,729.

<sup>&</sup>lt;sup>8</sup> In the absence of economies of scale which depend on size within the market, a newcomer could enter at any scale with no cost disadvantage. Also, the existence of economies of scale in national distribution creates an incentive to acquire a firm having such distribution.

<sup>10</sup> Id.

<sup>11</sup> Procter & Gamble Co., [1963-1965 Transfer Binder] TRADE REC. REP. ¶ 16,673, at 21,577 (FTC 1963).

Someone was a bit careless with the facts in using this argument, because Clorox was never advertised on network television before the merger.<sup>12</sup> Clorox used only spot television announcements, possibly because it faced widely varying competitive situations in different geographic areas. Spot television ads allow a firm to adapt its advertising to its marketing needs more efficiently than network advertising, which puts the same amount of advertising into all markets.

Table I below contains the estimated advertising expenditures of Clorox over the period 1955-1963. The figures reveal that Clorox was never advertised on network television before the merger and has not been advertised on network television since the merger. In addition, it appears that Clorox did not begin to use spot television until 1966.

	ESTIMATED ADVERTISING EXPENDITURES OF CLOROX BLEACH IN MEASURED MEDIA 1955-1963						
	General Magazines	Farm Magazines	Outdoor	Network TV	Newspapers	Spot TV	
1 <b>955</b> 1956	\$490,596 501,695	\$63,500 69,125	\$24,720	_	\$2,388,017 1,966,333	\$ 675,660	

78,005

1.537.376

1,276,363

1,634,000

1,446,000

1,352,000

976,866

415,234

1,930,720

2.696.020

3,027,000

2,500,000

3,340,000

3,852,160

5,794,320

TABLE I - -

If this is correct, then Clorox gained its dominant position in the household liquid bleach market without the use of television!

SOURCES: AMERICAN NEWSPAPER PUBLISHERS ASSOCIATION, EXPENDITURES OF NATIONAL Advertisers in Newspapers 1955-1963; Leading National Advertisers, National Advertis-ING INVESTMENTS 1955-1963; TELEVISION BUREAU OF ADVERTISING, SPOT TELEVISION ADVER-

What were the estimated savings in advertising costs to S.O.S. following the merger with G.F.? The hearing examiner's opinion mentions that several years after the merger, S.O.S. was advertised on some of G.F.'s nighttime television shows --- advertising which S.O.S. could not purchase before the merger. No estimate is given of any cost savings.<sup>13</sup> Despite this, the FTC found savings in advertising costs to S.O.S. (by combination of its advertising with General Foods) of 23 percent in network television, 15 percent in spot television, 5.5 percent in radio, and 5.15 percent in magazines.14

1957

1958

1959

1960

1961

1962

1963

342.256

354,800

379,000

521,000

446,000

503,970

844,538

TISING EXPENDITURES 1956-1963.

46,240

<sup>12</sup> Network sales are sales to national advertisers of the time of groups of individual stations affiliated with the networks. National spot sales are sales of station time directly to advertisers by individual stations.

<sup>18</sup> General Foods Corp., No. 8600 (FTC Dec. 18, 1964).

<sup>14</sup> General Foods Corp., [1965-1967 Transfer Binder] TRADE REG. REP. ¶ 17,465, at 22,727 (FTC 1966).

The numbers are highly inaccurate. (The 23 percent in network television is even larger than the 17 percent mentioned in the counsel's brief before the FTC.)<sup>15</sup> On the basis of Peterman's analysis of the discounts in network television, it is unlikely that the savings in time-costs exceeded 5 percent.<sup>16</sup>

## 2. Alleged Superior Efficiency of Network Television

The FTC argued in both cases that commercials during network programs, especially nighttime programs, are more effective than spot breaks, and that Clorox and S.O.S. could not afford to sponsor nighttime TV shows. Again no evidence was presented to demonstrate that the return per dollar of advertising was greater; such evidence is necessary since the network and spot rates differ. Presumably, the higher network rates reflect any advantage which exists. In both cases the FTC also argued that after the merger Clorox and S.O.S. could advertise jointly with the acquiring firm on a number of evening network shows — which they could not afford prior to the mergers — at a fraction of the cost of sponsoring the entire shows. Again, the FTC argument is weak since the growth of participation purchases made access to these shows possible even in the absence of the mergers.<sup>17</sup> Further, neither argument applies to Clorox since it did not advertise on network television.

#### 3. Other Alleged Economies in Marketing

The FTC argues in both cases that the wealth of the large firm can be used to finance sales promotion expenditures by Clorox and S.O.S. Both acquired firms allegedly did not engage in sales promotion activities prior to the mergers and both initiated them afterwards. However, Clorox spent less than \$500,000 per year, while S.O.S. spent approximately \$200,000 in 1963 on consumer sales promotions (primarily price reducing coupons and cents-off-labels).<sup>18</sup> Neither firm lacked the financial resources necessary for

18 Data on sales promotion expenditures of Clorox is found in Procter & Gamble Co.,

<sup>15</sup> Brief for Respondent at 43, General Foods Corp., No. 8600 (FTC, Dec. 18, 1964). 16 Peterman, The Clorox Case and the Television Rate Structures, 11 J. LAW & ECON. 321, 344-45 (1968).

<sup>17</sup> The trend in network television purchasing patterns has been toward more participation purchases and less full program sponsorship. Instead of spending their advertising funds on the sponsorship of one or two programs, advertisers now typically buy parts of several shows in the form of participations. Multiple or participating sponsorship of prime time programs increased from a little more than 10 percent of prime time program hours in 1957 to almost 80 percent in 1964. The growth in participation purchases may be explained as a means of spreading an advertiser's budget among a wider range of shows, permitting him to reach a greater unduplicated audience, as well as the different groups who are most interested in his different products. Note also that the growth in participation purchases makes it possible for smaller advertisers to buy commercial minutes during prime time, although it might not be feasible for them to sponsor a complete show during prime time. In effect, an advertiser can buy fractional amounts of a program. The growth in participation purchases has thus increased the opportunities available to smaller advertisers in network television.

such expenditures prior to the merger. Apparently, the merger gave the acquired firms access to the expertise of marketing men in the acquiring firms who conducted (or at least advised on) the sales promotions. It is also possible, since both acquiring firms devoted millions of dollars to sales promotion activities, that economies of size in these activities were made available to the acquired firms.

In both cases it is asserted that economies in distribution could result from use of the acquiring firm's sales force rather than the independent brokers used by both Clorox and S.O.S. prior to the merger.<sup>19</sup> S.O.S. also benefitted from economies in warehousing costs.<sup>20</sup> Little can be said about these other alleged economies resulting from the merger, except that they do not appear large.<sup>21</sup>

## C. Conclusions

Although the FTC overestimated the reductions in advertising costs to Clorox and S.O.S. which resulted from the mergers, apparently some economies were achieved. Therefore, the arguments outlined in Part A concerning errors in the FTC's position apply to these cases.

#### Advertising and Consumer Welfare

#### A. Introduction

### 1. The FTC's Position

The FTC admits that advertising stimulates competition insofar as it informs the consumer about alternative products. It also recognizes that it increases the sales of the advertised products and, with economies of scale, may reduce the unit cost and price of the product. However, it contends that this process does not occur in industries such as bleach and soap pads, where, since the products are identical, there is no reason other than price and availability for the consumer to prefer one brand over another. Therefore, heavy advertising does not increase the real alternatives open to the consumer; its sole justification is to create and protect the dominant positions

No. 6901, at 31, table 2 (FTC, Feb. 28, 1962); for S.O.S. in General Foods Corp., [1965-1967 Transfer Binder] TRADE REG. REP. ¶ 17,465, at 22,741 (FTC 1966). <sup>19</sup> There is no evidence that the independent brokers were less efficient than the P & G

<sup>&</sup>lt;sup>19</sup> There is no evidence that the independent brokers were less efficient than the P & G sales staff. Clorox continued to use the same brokers after the merger. [1963-1965 Transfer Binder] TRADE REC. REP. ¶ 16,673, at 21,577-78 (FTC 1963). For S.O.S. see [1965-1967 Transfer Binder] TRADE REG. REP. ¶ 17,465, at 22,740 (FTC 1966).

<sup>&</sup>lt;sup>20</sup> General Foods Corp., [1965-1967 Transfer Binder] TRADE REG. REP. ¶ 17,465, at 22,740 (FTC 1966).

<sup>&</sup>lt;sup>21</sup> Å final alleged source of competitive advantage to Clorox and S.O.S. is the large sales shares which P&G and G.F. have of other consumer products which are distributed through grocery stores. Because of the sizable sales of these other products, Clorox and S.O.S. may be in better bargaining positions to obtain shelf space from grocers as a result of the mergers. Again, this argument is lacking in both theoretical and empirical content. If P&G and G.F. could induce retailers to give their products favored treatment and better display positions, they would already have done so. In addition, no evidence was introduced by the FTC to support this argument.

of Clorox and S.O.S. Moreover, since the firms in such industries do not engage in price competition, prices do not fall. Indeed, the prices of Clorox and S.O.S. are higher than all other brands. Therefore consumers are compelled to pay higher prices, yet receive no benefits. In such industries "cost advantages that enable still more intensive advertising only impair price competition further; they do not benefit the consumer."<sup>22</sup>

## 2. The FTC's Error

The basic fallacy in the FTC's argument is the assertion that the different brands are identical. I agree that advertising results in higher prices for Clorox bleach and S.O.S. soap pads, but it also must yield benefits to consumers or they would be unwilling to pay the higher price. It will be rational for producers to advertise only if customers desire the advertising and are willing to pay the higher product price to cover its cost. In both of these markets, consumers had the choice of buying lower price, less advertised brands, yet they overwhelmingly preferred to buy Clorox and S.O.S.

#### 3. The Remaining Issues

Two additional components of the FTC's attack on advertising will be examined in detail. Part B considers whether advertising created concentrated, non-competitive bleach and soap pad market structures prior to the mergers, and if so, how this was accomplished. Part C examines the additional argument made by the FTC that the main economies resulting from these mergers are due to discriminatory volume discounts granted to large advertisers in network television.

#### **B.** Advertising and Market Structure

#### 1. Introduction and Summary

a. The FTC's Explanation of High Concentration and Lack of Entry.<sup>23</sup> In each case the FTC presents three arguments in support of its position

In 1957 the steel wool soap pad market was highly concentrated. S.O.S. had 51 percent of the market and its only sizable rival, Brillo, had 47.6 percent. The market share of S.O.S. had declined slightly in the two previous years. Three small producers accounted

<sup>22</sup> Procter & Gamble Co., [1963-1965 Transfer Binder] TRADE REG. REP. ¶ 16,673, at 21,586 (FTC 1963).

<sup>23</sup> In 1957 Clorox had 48.8 percent of national liquid bleach sales, and its market share had been steadily increasing for at least the previous five years. Purex, the nearest rival, had 15.7 percent, and the six largest firms accounted for 80 percent of the market. The remainder was divided among approximately 200 small regional and local producers. Small-scale entry into regional markets was possible and occurred in the post-war period. No patents existed, the information on production procedures was readily available, no shortages of equipment or raw materials existed, the equipment was inexpensive, and relatively small-scale production could be efficient. Transport costs were significant, making it unprofitable to ship bleach more than 300 miles from a plant. In 1957 Clorox had sales of about \$40 million and spent about \$3.7 million on advertising. Purex, which also sold products in the cleanser, soap, and detergent markets, had total sales of about \$50 million and spent about \$3.6 million on advertising. Total industry sales in 1957 were less than \$100 million. Sales of household liquid bleach expanded steadily in the post-war period.

that advertising created a noncompetitive market structure prior to the mergers. The main argument is that extensive advertising over a period of time has built up consumer preferences for the Clorox and S.O.S. brands, and that smaller competitors cannot obtain the funds necessary to advertise on a scale sufficient to overcome these existing preferences. And for the same reason — inability to raise sufficient funds to advertise effectively — entry cannot occur. Finally, the Commission argues that Clorox and S.O.S. continue to advertise heavily in order to increase the capital required for entry and to thereby further reduce the threat of entry.

b. Shortcomings in the FTC's Explanation. Examination of the arguments and the evidence demonstrates that all three arguments are erroneous. The conditions postulated by the FTC for the existence of strong brand loyalty do not exist in these markets. Further, the evidence presented indicates that strong brand loyalty does not exist in the bleach market. (No evidence was presented concerning brand loyalty in the soap pad market.) Similarly, there is no evidence of lack of capital on the part of the many possible entrants which are established firms in other consumer product markets. In addition, the capital needed to produce and sell in the bleach and soap pad markets is much smaller than in many other consumer product markets. The argument concerning advertising by Clorox and S.O.S. to prevent entry overlooks the more obvious explanation that the advertising stimulated industry demand. Since bleach and soap pad sales grew at a steady rate throughout the period covered in these cases, I argue that the advertising increased industry demand and was therefore profitable.

c. An Alternative Explanation of High Concentration and Lack of Entry. The success of Clorox and S.O.S. and the resultant high concentration are due to their success in securing national distribution. With national distribution Clorox and S.O.S. realize economies of scale in information.<sup>24</sup> That is, unlike brands distributed in only one region, nationally known and distributed brands are not as likely to lose the loyalty of consumers who move from one region to another. This competitive advantage increased in the post-World War II period with the increase in the movement of consumers among regions. Additionally, firms having national distribution can utilize national advertising media, which may be more efficient than local or regional media.<sup>25</sup>

24 This factor is mentioned in both cases.

25 The FTC mentions this factor in the Clorox case but does not discuss it. Because television is so important in the advertising of consumer products, the pertinent question

for the remaining 1.4 percent. Two of the three small firms had entered in the period 1952-1956. Thus, small-scale entry into regional markets was obviously possible and actually occurred. No patents existed after the 1930's, no shortages of equipment or raw materials existed, the equipment was specialized but could be obtained for about \$200,000 to \$300,000, and again, apparently relatively small-scale production could be efficient. In 1957 S.O.S. had sales of about \$14.6 million and spent about \$2.1 million on advertising. Brillo had sales of \$13.6 million and spent about \$1.8 million on advertising. Both had nationwide distribution. Total industry sales in 1957 were less than \$29 million. Sales of steel-wool soap pads expanded steadily in the postwar period.

Entry may not have occurred because economies of national distribution and advertising made entry feasible only on a large scale relative to the size of these markets. Such new entry would have substantially increased industry output and lowered industry price — conditions increasing the risk of unsuccessful entry. Also, the longer term profit prospects may not have been attractive due to the rising costs of obtaining retail shelf space and the likelihood of the introduction of superior substitute products.

2. Detailed Analysis of the Causes of High Concentration and Lack of Entry

a. Brand Loyalty. The FTC bases its economic argument concerning brand loyalty on the work of Professor Bain,<sup>26</sup> who argues that there are certain characteristics of products which determine the effectiveness of product differentiation in building consumer allegiance. According to Bain, the opportunities for product differentiation are especially good for "prestige" or "gift" goods, where price tends to be relatively less important to consumers than product reputation, and for products which are complex or have other characteristics which make consumers unable to evaluate them, even after repeated use.<sup>27</sup> Bain admits that his list of conditions favorable to product differentiation is not exhaustive because there are some industries which possess none of the above cited characteristics, and yet have extensive product differentiation.<sup>28</sup> Soap pads and bleach would appear to be good examples; both are basic household necessities purchased frequently and at relatively low unit prices. In fact, these products have characteristics which Bain asserts are not conducive to product differentiation.

Conversely, the best basic settings for slight product differentiation ... are found for goods which are purchased for their basic or functional utility, which the consumer can easily evaluate and appraise, and which, being nondurable, are purchased frequently and in small amounts, allowing the consumer a maximum opportunity for experimentation with the comparison of alternatives.<sup>29</sup>

In addition, an important feature of the spot market is that many, if not all, television stations have regional and local spot rate cards in addition to the national spot rate card. Regional and local advertisers can buy time in the spot market at rates of 20 to 30 percent lower than the rates charged the national advertisers. Smaller regional enterprises which compete with large national concerns can thus obtain much lower rates. Also, retailers can advertise private brands which compete with national brands at much lower rates. The following unpublished sources contain data on regional and local television rates: Gardner Advertising Company, Local Television Rate Survey (mimeographed 1966); Gardner Advertising Company, Study of Advertising Rates in the Television Industry (mimeographed 1961).

26 J. BAIN, INDUSTRIAL ORGANIZATION (1959).
27 Id. at 417-18.
28 Id. at 418.
29 Id. at 417-18.

is whether network television is a more efficient advertising medium than spot television. I doubt there are significant differences in efficiency. Network sales are sales to national advertisers of the time of groups of individual stations affiliated with a network. National spot sales are sales of station time directly to advertisers by individual stations. Thus spot television is a close substitute for network television, and the two sets of advertising rates will reflect these competitive interrelationships.

According to Bain's analysis, brand advertising would not be expected to be very successful in developing consumer loyalty for bleach and soap pads and, therefore, would not be expected to give large firms dominance over smaller firms or to impede the entry of newcomers.

In addition, the FTC presents evidence in the *Clorox* case which demonstrates that brand loyalty was not strong in the bleach industry.

The allegiance to a particular brand that is created by mass advertising and promotion tends, in the case of low-cost, high-turnover household products, to be somewhat ephemeral; the housewife is easily lured from her accustomed brand by promotional and advertising efforts on the part of rival manufacturers. The record in this case contains a graphic illustration of the volatile quality of consumer brand preference.<sup>30</sup>

The FTC then cited what happened in Erie, Pennsylvania, when Purex attacked Clorox's entrenched position.<sup>31</sup> (Clorox controlled more than 50 percent of the market.) Purex was sold in a new container and price-off labels were used intensively. "Within a few weeks, Purex, which previously had done no business in the area, had won a market share of more than 30 percent."<sup>32</sup> Clorox, counterattacking with price-off and premium offers and intensive advertising, subsequently reduced Purex's share to 7 percent.<sup>33</sup>

The FTC, in applying the Bain analysis, fails to recognize that the liquid bleach and the steel-wool soap pads markets do not possess the characteristics necessary for the development of strong brand loyalty, and refuses to accept the evidence which demonstrates the lack of brand loyalty.

b. Capital Barriers to Competition. The FTC asserts that small firms and potential competitors in the bleach and soap pad markets lacked access to the funds necessary to secure national distribution and to undertake largescale national advertising. Yet, although none of the smaller regional and local competitors in either market achieved national distribution during the 1950's, there is no evidence that lack of access to funds was responsible.

This argument is even less convincing in view of the fact that both Clorox and S.O.S. started as small enterprises around 1920, and grew to leading positions in their respective markets apparently by means of superior skill and efficiency. Apparently both firms spent less than \$1 million per year on advertising prior to the 1950's, and yet these small firms were successful.

In addition, this lack of capital argument is weak, because there are many established firms in other markets which could raise sufficient capital to enter and compete in these markets. The argument that large capital costs inhibit entry fails to distinguish between entry by new and small firms and entry by established and large diversifying enterprises. The latter will not tend to encounter any alleged imperfections in the capital market, and will

 <sup>&</sup>lt;sup>30</sup> Procter & Gamble Co., [1963-1965 Transfer Binder] TRADE REC. REP. ¶ 16,673, at 21,563 (FTC 1963).
 <sup>31</sup> Id.
 <sup>32</sup> Id. at 21,564.
 <sup>33</sup> Id.

not be prevented from entering if entry appears profitable. Additionally, the established firm may be able to adapt its existing dealer organization to the marketing of new products or to overcome brand preferences by using a well established brand name to give prestige to a new product — in both cases significantly reducing the capital costs required for entry.

c. Lack of Entry. One outstanding fact appears to support the position of the FTC that significant barriers to entry exist in these markets — namely, that no sizable new national competitor entered either market over more than a 10-year period, despite strong growth in industry demand and apparently attractive rates of return. The only sizable potential entrant mentioned in either case, P&G, considered entry into the bleach market as a new competitor to Clorox and Purex and decided against it.<sup>34</sup>

Why didn't P&G enter? One possible explanation is that P&G, despite its vast resources, skilled marketing personnel, and economies of scale in advertising, did not believe it could secure a sufficient share of the bleach market to make a profit. Clorox and Purex, while having much smaller resources, perhaps had superior specialized skills and knowledge in this market. On the basis of the available evidence, I do not believe that Clorox had any cost advantage over P&G because of their specialized skills or knowledge. But then, there are no barriers to entry, since barriers are defined to be cost advantages of established firms over potential entrants. Can the lack of entry be explained in the absence of barriers?

A possible explanation for the lack of entry in the absence of barriers is that entry into the bleach and soap pad markets was unattractive due to the economies of scale in those industries. Economies of scale refer to the relationship between firm size and costs of production, distribution, and marketing. The greater the economies of scale, the greater the range over which the average costs of larger outputs will fall. The minimum optimum size of firm refers to the smallest output at which the economies of scale are exhausted. If a firm operated at a smaller scale, it would not be utilizing all of the available economies of size, and would thus have higher costs than larger firms. If, in order to achieve the lowest average cost, a firm must produce an output at least equal to 50 percent of the market, then there can be, at most, two firms in the industry in long-run equilibrium.<sup>35</sup>

Will the existence of economies of scale in such an industry place a potential entrant at any cost disadvantage<sup>236</sup> Yes, but only if the newcomer

<sup>34</sup> Id. at 21,563.

<sup>&</sup>lt;sup>35</sup> There can be at most two firms in the industry if the economies of scale are internal to the industry. There can be more than two firms if the economies of scale can be achieved through product-extension mergers with firms in other markets.

<sup>&</sup>lt;sup>36</sup> The argument applies only to economies which are *internal* to the industry. I argued above that Clorox and S.O.S. achieved their large market shares as a result of economies of scale in national distribution and in national advertising. It is efficient to use national advertising media only if the firm has national distribution. National distribution makes it possible to retain customers who move from one region to another. Therefore, P&G and G.F., if they entered by setting up new firms, would have to enter at a national

has a firm of less than optimum size. Economies of scale do not give established firms any competitive advantage over newcomers who enter at minimum optimum size and, therefore, do not constitute a barrier to entry. However, the newcomer will have to attract numerous customers away from existing firms in order to sell his substantial output. In addition, his sizable output increases the industry output, and can significantly lower the industry price. If the pre-entry industry price is close to or equal to minimum average cost, then the new price can be below minimum cost and losses will be incurred by some or all firms — including the entrant — until industry output is reduced to the previous level. Thus, the risk of unsuccessful entry in such markets tends to be much greater than in markets in which the optimum size of firm is small relative to the size of market. Entry will be easier in situations where the minimum efficient market share of a newcomer is small, since his entry will then have a small impact on existing firms and industry price.

It would be reasonable for the management of P & G, perceiving these problems, to rationally decide not to enter via internal growth. Large, established, national advertisers, who could enter and successfully compete due to greater economies in national advertising than those attained by Clorox and S. O. S., would still prefer to enter other consumer product markets in which efficient size could be attained without the prospect of sharing or incurring losses due to excess capacity.

Both the bleach and soap pad markets enjoyed steady growth in industry demand, which might have increased the number of optimum size firms which could exist in each market. However, the failure of new entry in the face of sizable growth in industry demand can possibly be explained by a growth in the minimum efficient size of firm in these markets. Clorox and S. O. S. both apparently steadily increased their market shares over time, with the growth in industry demand. If the minimum efficient size of firm increased at a faster rate than the rate of growth in industry demand, then concentration would increase and entry would tend to be unprofitable.

However, since prices in both markets were above minimum average cost, additional output would not necessarily result in losses. Another possible explanation of the lack of entry is that future prospects for the bleach and soap pad industries appeared sufficiently poor to make entry via internal growth much less profitable than entry via merger. A basic difference between the two forms of entry is the length of time involved. P & G and G. F. might reasonably have predicted a reasonable rate of return on merger investment over a short period of time, possibly due to economies in marketing and distribution which they could achieve. The short-term *expected* rate of

scale or suffer a cost disadvantage compared to Clorox and S.O.S. Even if P&G and G.F. could advertise on network television at lower rates, it would not be beneficial for them to do so until they had achieved national distribution of their brands of bleach and soap pads. In the absence of economies of scale which depend on size within the market, a newcomer could enter at any scale with no cost disadvantage.

industry profit apparently was attractive because both P & G and G. F. paid sizable premiums to enter the market via the merger route.<sup>37</sup> If short-run profit prospects were not attractive, these acquisitions would not have been rational. The longer-term outlook might have been less attractive due to expected growth in technical substitutes for liquid bleach and for steel wool soap pads. The development of detergents with enzymes has probably encroached to some degree on liquid bleach sales. Furthermore, the development of plastic and other non-steel-wool scouring devices has probably tended to limit the expansion of steel-wool soap pad sales, especially with the growth in consumer use of teflon-coated pans, which cannot be cleaned with steel wool without damaging the coating.

Another possible factor clouding the future profit prospects is the growing limitations on access to retail shelf space. There is some evidence that the number of products competing for shelf space has expanded much more rapidly than the growth in number and size of stores.<sup>38</sup> If there has been a relative growth in items which yield higher returns to retail grocers, then the amount of shelf space devoted to bleach and soap pads will tend to decline. These circumstances would make entry more costly and, therefore, less attractive. I have been unable to collect the evidence to test this hypothesis.

d. Lack of Expansion into the National Market by Smaller Competitors. Economies of scale in a market are also important to existing small firms. Small firms operating in these markets have higher costs than firms of optimum size, and thus have an incentive to expand. However, the size of the market will limit the number of firms of optimum size which can profitably operate in the industry. For example, if a firm must produce an output equal to at least 50 percent of the market in order to achieve lowest average cost, then there can be, at most, two firms in the industry in longrun equilibrium. Thus, while small firms would like to expand, if they recognize that the number of efficient national firms which can survive may be only two, they might rationally decide not to expand into the national market. The failure to expand by regional competitors does not necessarily spell doom for them if there are regional markets which can efficiently be served by smaller, local firms because of the high transportation costs. These circumstances appear to exist in the bleath market, and possibly also in the soap pad market. Under these circumstances, the presence of large national firms and small regional firms may be expected to continue. Also, they may not have expanded because of lack of superior management, which made the expected return on the additional investment appear unattractive, or because their management simply preferred to limit operations to one area.

<sup>37</sup> See General Foods Corp., [1965-1967 Transfer Binder] TRADE REG. REP. ¶ 17,465 at 22,738 (FTC 1966); Procter & Gamble Co., [1963-1965 Transfer Binder] TRADE REG. REP. ¶ 16,673, at 21,565 (FTC 1963).

<sup>&</sup>lt;sup>38</sup> "There is an acute shortage of shelf space for all products . . . in the nations' grocery stores because of the greatly increased number and types of items carried by grocers in recent years." No. 6901, at 24 (FTC, Feb. 28, 1962).

## 3. The Cause of Heavy Advertising in These Markets

The reason for the heavy advertising of liquid bleach and steel-wool soap pads remains to be considered. The FTC argues that the heavy advertising of identical products in oligopolistic markets does not increase industry sales, but does protect the market shares of the dominant firms.<sup>39</sup> The Commission does not recognize the competition for consumer expenditures between these products and other products. To assert that the advertising did nothing to stimulate industry sales of bleach and soap pads is, I believe, unwarranted. Both industry sales and advertising rose steadily over the period. An alternative explanation can be offered which is consistent with this evidence and which recognizes that the competitive effects of advertising differ from the effects of a price reduction, because the firms can compete for new customers without earning lower returns on sales to previous customers.

Telser provides a model which incorporates this difference in competitive effects and which appears to fit the liquid bleach and soap pad markets.

Commodities of certain characteristics and produced under oligopolistic conditions are likely to be heavily advertised. First, there must be few firms in the industry and cross-elasticities must be high. The latter implies that if one firm reduces its price and the others do not follow, it can increase its sales by a large amount at their expense. Second, the price elasticity for the product must be low. Third, there must exist a large potential market that can be realized by means of advertising.<sup>40</sup>

The liquid bleach and steel-wool soap pad markets contain only two sizable producers. Prices of the two competing brands are almost identical, suggesting high cross elasticities of demand.<sup>41</sup> In such cases, a price decrease by one firm will increase sales primarily at the expense of rivals. But if the price elasticity of demand for the product as a whole is low, which is likely, then a price reduction will increase industry sales very little.<sup>42</sup> On the other hand, competition by advertising can expand the total market if new customers can be convinced to try the product.

Significant growth in industry sales accompanied the advertising of Clorox and S.O.S. Sales of household liquid bleach in the 1956-1958 period exceeded those in the 1953-1955 period by 27.62 percent,<sup>43</sup> and sales in the 1959-1961 period exceeded those in the 1956-1958 period by 20.57 percent.<sup>44</sup>

<sup>&</sup>lt;sup>39</sup> Procter & Gamble Co., [1963-1965 Transfer Binder] TRADE REG. REP. ¶ 16,673, at 21,586 (FTC 1963).

<sup>&</sup>lt;sup>40</sup> Telser, How Much Does It Pay Whom to Advertise?, 50 AM. ECON. REV. 194, 201 (1961).

<sup>&</sup>lt;sup>41</sup> The cross elasticity of demand is the percentage increase in quantity demanded of one brand in response to a given percentage increase in the price of the other.

<sup>&</sup>lt;sup>42</sup> The elasticity of demand is the percentage change in quantity divided by the percentage change in price. The less sensitive demand is to price, the smaller will be the increase in quantity demanded in response to a given percentage decrease in price.

<sup>&</sup>lt;sup>43</sup> Brief for Petitioner at 75, 77, Procter & Gamble Co. v. FTC, 358 F.2d 74 (6th Cir. 1966).

<sup>44</sup> Id.

"Sales of S.O.S. soap pads increased from \$3.9 million in 1948 to \$14.6 million in 1957."<sup>45</sup> Total manufacturers' household steel wool sales increased from slightly over \$24 million in 1955 to over \$34 million in 1962.<sup>46</sup>

#### 4. Conclusions

The FTC explains the high concentration and lack of entry primarily in terms of extensive advertising of identical products by established firms, and limited access to funds by actual and potential competitors. The FTC asserts that heavy advertising of identical products produces no benefits to consumers. I argue that the high concentration and the lack of entry may be due to economies of large size in national distribution and in national advertising which suggest efficiencies beneficial to consumers. Economies of large firm size make necessary large scale entry, which would substantially increase industry output and, possibly, significantly lower industry price. Both factors increase the risk of unsuccessful entry. Lack of entry on a national scale may also be due to a poor longer-term industry-profit outlook. The FTC argues that continued advertising serves only to prevent entry, while I explain the continued advertising of Clorox and S.O.S. as a means of increasing industry demand — which again suggests that advertising benefits consumers by informing them of alternative products.

#### C. Economies in Network Television Advertising

#### 1. The FTC's Position and Its Shortcomings

a. The Issue. The FTC asserts that volume discounts for time purchases in network television represent discriminatory prices granted to larger advertisers. I argue that no discrimination exists. The reason is that each advertiser purchases time and talent in order to reach potential customers, and the number of television viewers varies over the day, week, and year. The discounts for time purchases are simply price adjustments for these variations in audience size. Therefore, the relevant issue is whether the network rate structures provide large advertisers with lower cost-per-thousand television-homes reached, than small advertisers. The cost-per-thousand evidence discussed below shows that large advertisers do not have lower costs-per-thousand than small advertisers.

b. Shortcomings in the FTC's Rate Analysis. The FTC presents no concentration data or other evidence of network market structure to demonstrate that large advertisers have the power to extract price concessions from the networks. The share of total network television advertising accounted for by the largest eight advertisers in 1956, 1960, and 1964 was 32.5 percent, 29.9 percent, and 27.7 percent respectively.<sup>47</sup> These are relatively small con-

<sup>45</sup> General Foods Corp., [1965-1967 Transfer Binder] TRADE REG. REP. ¶ 17,465, at 22,732 (FTC 1966).

<sup>46</sup> Id. at 22,743, Table I.

<sup>47</sup> See generally AMERICAN NEWSPAPER PUBLISHERS ASSOCIATION, EXPENDITURES OF NA-TIONAL ADVERTISERS IN NEWSPAPERS (1956, 1960 and 1964); LEADING NATIONAL ADVERTISERS, ING, SPOT TELEVISION ADVERTISING EXPENDITURES (1956, 1960 and 1964).

centration ratios, and also show a decline in the leading advertisers' share over time! These data indicate that the largest advertisers are not in a position to compel networks to grant them special discounts, and that the relative market position of the largest advertisers has declined over time, thus further reducing any prospect that they might achieve such a position.

Furthermore, a basic fact overlooked by the FTC undermines its charge that network television rate structures discriminate against small advertisers, namely that for all practical purposes no small advertisers use network television. In fact, very few national advertisers use this medium. In 1956 there were 320 network television advertisers, 240 of whom spent more than \$100,000 and 96 of whom spent \$1 million or more on time purchases only; in 1966 there were 361 advertisers; 326 spent more than \$100,000 and 180 spent more than \$1 million on purchases of time and program.<sup>48</sup> These findings seem reasonable since smaller firms without nationwide distribution do not find it profitable to use network television because much of the audience would be located in areas where they do not have distribution.

However, to complete the critique of the FTC's position, an analysis will be made of the prices paid by large and small network television advertisers. The most disturbing element of the FTC's analysis of television advertising rates is that the FTC never considered why the television networks offered volume discounts, nor the definition of the relevant product or service provided by television.<sup>49</sup> No explanation based on underlying economic factors was even mentioned. In fact, the distinctions between network and spot television markets and between the pricing of time and programs were not clearly perceived.<sup>50</sup> These glaring deficiencies have not gone unnoticed by economists writing about these cases.<sup>51</sup>

<sup>49</sup> The FTC also failed to recognize that because the discounts were at least a function of the time of day and the season of the year, the relationship between the quantity purchased and the discount earned is very complex and cannot be directly compared to a market in which discounts depend only on the volume purchased.

<sup>50</sup> Conventional network sales are sales to national advertisers of the time of groups of individual stations affiliated with a network. National spot sales are sales of station time directly to advertisers by individual stations. With conventional network sponsorship the advertiser purchases units of time, such as 8 P.M. to 9 P.M. once weekly, usually in multiples of 13 weeks, on a specified number of network affiliated stations. This contract for time is subject to the discounts given on the network rate card. However, the advertiser must present a program and the program costs, which often account for 50 percent of total costs for programs shown between 7:30 P.M. and 11:00 P.M., are not subject to discount and the rates for programs do not appear on the network rate cards. Programs can be purchased from various program producers as well as the networks. Networks also offer *participation* programs, in which several advertisers jointly sponsor a program costs. The time discounts also do not apply to participation purchases. For a detailed discussion of these rate structures see Peterman, *The Structure of National Time Rates in the Television Broadcasting Industry*, 8 J. LAW & ECON. 77 (1965).

<sup>51</sup> See, e.g., Blank, Tonypandy Once Again, 42 J. BUS. U. CHI. 104 (1969); Blank, Television Advertising: The Great Discount Illusion, or Tonypandy Revisited, 41 J. BUS. U.

<sup>&</sup>lt;sup>48</sup> These figures were derived from the following sources: LEADING NATIONAL AD-VERTISERS, NATIONAL ADVERTISING INVESTMENTS (1956 and 1966). The data on network television expenditures in these reports cover only estimated time purchases in 1956, but include estimated time and program purchases in 1966. It is possible that the number of advertisers spending less than \$20,000 in network television is under-reported in this source.

## 2. An Alternative Economic Analysis of the Network Rate Structures

a. The Basic Pricing Problem. The end-product of television, or any other advertising medium, from the point of view of the advertiser is the audience; the advertiser incurs time and talent costs for the opportunity to reach potential customers. One noteworthy aspect of the sale of these opportunities to advertisers by the television networks is that the amount of the end-product — the audience — cannot be determined as accurately as in many businesses. Obviously, the amount spent on talent for a show can influence audience size. The greater the amount spent on the talent used in a program, the larger the audience viewing the program will tend to be. But even if the quality of all programs were the same, the size of the audience would tend to vary over the viewing day. More people watch television in the evenings than in the daytime, and due to factors external to the television industry — the work and vacation habits of the public — the average audience size tends to be larger in the winter than in the summer. The fundamental pricing problem facing the three television networks and the individual television stations is to set prices which take into account the variations in the quantity of the television audience over the viewing day, week, and year. The main features of the television rate structure can be understood in terms of this basic pricing problem.

b. The Evidence on Cost-Per-Thousand. The relevant question is whether the network television advertising rate structures provide large advertisers with lower costs-per-thousand television-homes reached than small advertisers. To answer this question, the average cost-per-thousand television-homes reached in December 1965, was computed for a sample of network television advertisers. A sample of 71 advertisers was selected by taking the largest advertiser, the fifth largest advertiser, and every fifth advertiser thereafter in descending order of total network expenditures in 1965. However, 31 did no network television advertising in December 1965, leaving 40 advertisers to be included in the statistical analysis. Of these 40 advertisers. 29 advertised on nighttime network television in December, 24 on davtime network television, and 13 on both. The advertisers, their total network television expenditures in 1965, and their average cost-per-thousand household reached are presented in Table II below. These expenditure data include estimated net time and talent costs. Inspection of these figures reveals that the cost-per-thousand numbers are much lower for daytime television than for evening television.52 Therefore, daytime and evening cost data were treated separately.

CHI. 10 (1968); Leonard, Network Television Pricing: A Comment, 12 J. BUS. U. CHI. 93 (1969); Peterman, The Clorox Case and the Television Rate Structures, 11 J. LAW & ECON. 321 (1968).

<sup>&</sup>lt;sup>52</sup> The average cost-per-thousand television-homes reached per commercial minute in the daytime is little more than one-third the cost-per-thousand television-homes reached in the evening on network television. These systematic differences in cost-per-thousand figures are probably due primarily to the absence of many members of the household during the viewing day. Thus the quality of the audience from the point of view of advertisers is much less during the daytime.

	Cost-Per-Thousand			
	Total Network TV	TV Homes Reached		
	Ad Expend 1965	Dee	c. 1965	
Advertiser	(\$000)	Day (\$)	Night (\$)	
Procter and Gamble Company	85,710	1.32	3.87	
Colgate-Palmolive Company	39,934	1.48	4.41	
General Motors Corporation	28,328		2.98	
Ford Motor Company	18,874		4.08	
Liggett and Myers Tobacco Company	16,083		3.91	
P. Lorillard Company	13,011		3.68	
Ralston Purina Company	9,825	1.31	3.86	
Pillsbury Company	8,293	1.29	3.51	
General Electric Company	7.252	2.14	2.79	
American Cyanamid Company	6,252	1.39	4.06	
American Telephone and Telegraph Compan			8.84	
Polaroid Corporation	5,725		4.71	
Shulton, Incorporated	5,388	1.77	2.89	
Borden Company	4,440	1.54	5.31	
Maybelline Company	3,367		5.88	
Sears Roebuck and Company	3,106		4.34	
Gulf Oil Corporation	2,840	1.65	2.25	
Socony Mobil Oil Company, Incorporated	2,631		2.14	
Ocean Spray Cranberries, Incorporated	2,462	1.57	3.13	
Motorola, Incorporated	2,202		3.77	
Wilkinson Sword, Incorporated	2,023		2.38	
Sperry and Hutchinson Company	1,905		4.03	
Hoffman-La Roche, Incorporated	1,844	1.63	3.63	
Schering Corporation	1,575	1.69	3.17	
Mead Johnson and Company	1,300	1.81	0	
Associated Products, Incorporated	1,123	1.01	2.58	
Marx Louis and Company, Incorporated	1,053	1.16	4.50	
American Doll and Toy Corporation	815	1.03		
Wrather Corporation	766	1.06		
Remco Industries, Incorporated	615	1.13		
Lanvin-Charles of the Ritz, Incorporated	565		3.77	
General Telephone and Electronics Corporatio			4.32	
	396	1.74	1.04	
Duffy-Mott Company, Incorporated Buxton, Incorporated	364	1.48	4.42	
	145	1.92		
Mogen David Wine Corporation	90	2.16		
Sanford Ink Company	81	.93		
Masco Corporation	70	.93		
Krim-Ko Corporation	70 36	.95 1.16		
Wham-O Manufacturing Company	20	1.10	4.00	
Sta-Nu Corporation	40	1.47	3.89	
Average Cost-Per-Thousand		1.11	5.05	

TABLE II Cost-Per-Thousand Television-Homes Reached in December 1965 Via Network Television for a Sample of National Advertisers

Sources: Leading National Advertisers and Broadcast Advertising Reports, Network Television Advertising Reports (1965); A. Nielsen, National Nielsen Television Index, Complete Report for November-December (1965).

Regressions were run with average cost-per-thousand as the dependent variable, and total advertising expenditures as the independent variable. Both linear and log-linear forms were used for both daytime and evening cost estimates, making a total of four regressions. All regressions yielded statistically insignificant coefficients of the total expenditure variable and very low correlation coefficients. These results indicate that average cost-perthousand television-homes reached does not decline with increasing total network advertising expenditures. The data offer no support for the view that large advertisers in network television obtain lower cost-per-thousand rates than small advertisers.

However, because total expenditures appear on both sides of the equation, this imparts an upward bias to the coefficient of total expenditures.53 To avoid this statistical problem, the regressions were recalculated in a different form. Gross home-commercial impressions, the sum of the products of the number of commercial minutes each advertiser had in each of his programs multiplied by the average minute audience reported for each program during the month, were used as the dependent variable. As before, the independent variable was each advertiser's total network advertising expenditures. A coefficient greater than one for the expenditure variable would indicate that audience increased more than proportionately with total expenditures, and therefore, that the cost-per-thousand decreased - an obvious advantage to large advertisers. Two linear regressions were run - one using daytime and the other using evening data. Neither coefficient of the expenditure variable was greater than one. (Similarly, when each advertiser's December advertising expenditures was used as the independent variable, the respective coefficients were, once again, less than one.) Thus these data do not support the allegations of the FTC.

c. The Relevancy of the Cost-Per-Thousand Measure. In a footnote in the General Foods case, the FTC recognizes the cost-per-thousand measure but finds it to be an inappropriate measure of the efficiency of advertising: "What respondent is in fact equating with efficiency is the popularity of a program not originally anticipated and therefore not paid for."54 An implication of this line of reasoning is that if expectations concerning audience size had been realized, all advertisers would have had the same cost-perthousand homes reached - an implication which is, of course, inconsistent with the FTC's position that the rate structure favors large advertisers. Again the FTC apparently did not realize the inconsistency of its arguments. Even ignoring this inconsistency, the FTC is still in error since the realized rates are the relevant figures. They measure the productivity of the advertising expenditures, and therefore the return earned on the advertising. Cost-perthousand is the price of the service provided to advertisers by the networks. Prices of time and talent are only the costs of inputs used in producing the service.

d. The Adequacy of the Cost-Per-Thousand Measure. Sales of an advertiser's product will be a function not only of the size of the audience reached, but also of the composition or quality of the audience. Many

<sup>53</sup> I am indebted to W. Allen Wallis for pointing out this statistical problem and for suggesting the alternative formulation of the statistical test.

<sup>&</sup>lt;sup>54</sup> General Foods Corp., [1965-1967 Transfer Binder] TRADE REG. REP. ¶ 17,465, at 22,729 n. 11 (FTC 1966).

viewers may not use the product, and therefore are of little value. Also, typically a small percentage of users of a product account for a high percentage of total sales, and these heavy users may not be distributed uniformly among program audiences. Another important qualitative characteristic is the unduplicated audience --- those people who have not been reached by the firm's other advertising. A more accurate measure of the value of advertising in any medium than the audience reached would be the viewers' purchases of the product type represented by the advertiser's brands. For example, if the advertiser knew sales of his product were a positive function of income and family size, he might prefer to advertise on a program that reached higher income, larger families even if the cost-per-thousand television-homes reached via this program were higher than that of an alternative program which reached greater audiences but contained fewer potential customers for his product. Refinements in the cost-per-thousand measure to take account of differences in potential sales among program audiences have not been made in this paper.

#### 3. Conclusions

The cost-per-thousand television-homes reached is the relevant price of the product sold to advertisers by the networks. These prices are not significantly lower for large network television advertisers, and thus the data provide no support for the FTC's allegation of discriminatory prices favoring large advertisers.

## MERGERS AND RATES OF RETURN

The FTC argues that diversification provides efficiencies of large size to acquired firms. If this hypothesis is true, then the earnings of the acquired firms, and therefore of the diversifying firms, should increase. A number of statistical studies have measured the profitability of mergers.<sup>55</sup> Since there is little need to discuss the details of these studies here, I shall simply summarize their relevant findings. The findings are unanimous — merging does not yield substantial profits for the acquiring firms. One leading study finds that those firms which merge appear to serve managers' interests more than stockholders' interests, because merging firms have higher growth rates but earn lower rates of return than internal growth firms.<sup>56</sup> Another study concluded: "[T]he fact that mergers generally do not produce functional gains means merely that mergers offer few opportunities for increased efficiency."<sup>57</sup>

At the same time the FTC is attacking conglomerate mergers for in-

<sup>&</sup>lt;sup>55</sup> See, e.g., S. REID, MERCERS, MANAGERS, AND THE ECONOMY (1968); T. Hogarty, The Success of Industrial Mergers, June 1969 (unpublished thesis in the State University of New York at Buffalo, Graduate School); Reid, Is the Merger the Best Way to Grow?, 12 BUS. HORIZONS 41 (1969); Segall, Merging for Fun and Profit, 9 IND. MANAGEMENT REV. 17 (1968).

These studies deal with all types of mergers, not just product-extension mergers. 56 S. RED, supra note 55, at 131-49.

<sup>57</sup> T. Hogarty, supra note 55, at 58.

creasing the efficiency, and hence, enhancing the dominant market positions of acquired firms, the empirical work on the profitability of mergers is questioning the efficiency of these mergers!

#### **CONCLUSIONS**

It is unnecessary for the courts to weigh the possible improvements in efficiency caused by product-extension mergers against possible anticompetitive effects because the latter do not exist. In the presence of economies of scale in national advertising, product-extension mergers permit more firms to exist in consumer product markets because the economies of large size are derived from sales in several markets rather than in one market.

This paper has attempted to demonstrate major defects in the economic arguments used by the FTC in its attack on product-extension mergers and in its attack on advertising, and to show that the evidence presented by the FTC fails to support its arguments. The FTC is primarily concerned about the transformation of small business into large business and about the decline in the number of firms in small-firm industries. The FTC fails to understand that in the presence of economies of scale in advertising, it cannot prevent firms in industries such as bleach and soap pads from becoming larger, but can only determine whether the firms become larger through product-extension mergers without increasing market concentration or through increasing their market shares. The FTC also fails to recognize that allowing these mergers, rather than prohibiting them, makes possible a larger number of efficient firms in each market, thus lowering concentration in these markets.

Prohibiting product-extension mergers will lead to higher concentration in individual product markets unless no economies of scale can be achieved through such mergers. But then the FTC cannot demonstrate anticompetitive effects resulting from these mergers because the FTC's attack is an attack on efficiencies of large size.

With respect to other issues raised by the FTC, there is evidence that advertising did not eliminate price competition in these markets,<sup>58</sup> that advertising was beneficial to consumers, and that discriminatory discounts were not given to large network television advertisers.

On the basis of the arguments and evidence examined in this paper, I conclude that both product-extension mergers and advertising benefit consumers.

#### APPENDIX

#### POTENTIAL COMPETITION AND OLIGOPOLISTIC PRICING

#### The FTC's Argument

Product-extension mergers allegedly tend to lessen price competition in these markets because of their adverse effect on potential competition. The FTC argues that the condition of entry is an important competitive factor in oligopolistic industries be-

<sup>&</sup>lt;sup>58</sup> At least this is true in the bleach market. Procter & Gamble Co. [1963-1965 Transfer Binder] TRADE REC. REP. ¶ 16,673, at 21,578 (FTC 1963).

cause the threat of new entry may cause existing oligopolists in the market to set lower prices in order to discourage entry.

The FTC asserts that P&G was the most likely potential entrant into the household liquid bleach market, and that its presence as a potential entrant exerted a significant competitive influence on industry prices. The merger allegedly eliminates this significant component of competition in an oligopolistic industry. General Foods was not considered to be a potential entrant into the soap pad market and thus its merger with S.O.S. did not contain the same adverse change in the competitive structure. Both mergers, however, resulted in economies in advertising for the dominant firm in the bleach and soap pad markets, and thus increased barriers to entry. Therefore, both Clorox and S.O.S. can set higher prices without fear of entry.

My criticism is simply that there is no evidence in either case that potential competition had any effect on prices before the mergers. Therefore, any alleged alterations in the state of potential competition resulting from these mergers cannot be said to have lessened competition.

#### The FTC's Evidence

No determination was made whether any other soap and detergent manufacturers had considered entry into the bleach market, or whether any other packaged food producers had considered entry into the steel-wool soap pad industry. The FTC's "evidence" in the *Procter* & *Gamble* case consists of the following argument. P&G was a large, experienced firm which produced many household cleaning products. Allegedly, it frequently had entered new product markets by internal growth; and it had considered entering the bleach market. "By virtue of all these facts, Procter must have figured as a tangible influence on Clorox's policies until the merger eliminated it as a potential competitor."<sup>59</sup> There is even less evidence of the effects of potential competition in the *General Foods* case because General Foods was not considered to be a potential entrant. The FTC's "evidence" consists of the following argument:

If entry were not attractive to P & G, with all of its marketing advantages, how could it be attractive to any other firm? If not, then potential competition was not a significant competitive factor in the household bleach market. The evidence supports this argument even more strongly in the household steel-wool soap pad market, because there is no showing that General Foods or any other firm even considered entry via internal growth. The available data indicate that entry on a national scale was unattractive before the mergers occurred so that industry price in these markets was not affected by potential competition.

59 Id. at 21,584.

<sup>60</sup> General Foods Corp., [1965-1967 Transfer Binder] TRADE REG. REP. ¶ 17,465, at 22,730 (FTC 1966).