ECONOMIC EFFECTS OF ADVERTISING

by

MADHU N. DHARAWAT

B. A., St. Xavier's College, Bombay University, 1959
M. A., Department of Economics, Bombay University, 1961

A MASTER'S REPORT

submitted in partial fulfillment of the requirements for the degree

MASTER OF SCIENCE

College of Commerce

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1964

Approved by:

[Signature]
Major Professor
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>ADVERTISING'S EFFECTS ON DEMAND</td>
<td>7</td>
</tr>
<tr>
<td>ADVERTISING'S EFFECTS ON SUPPLY AND COST</td>
<td>15</td>
</tr>
<tr>
<td>ADVERTISING'S EFFECTS ON CONSUMPTION AND ITS RELATION</td>
<td>26</td>
</tr>
<tr>
<td>TO FUTURE PROSPERITY</td>
<td></td>
</tr>
<tr>
<td>SUMMARY AND CONCLUSION</td>
<td>44</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>47</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>48</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>53</td>
</tr>
</tbody>
</table>
INTRODUCTION

"No American, even though he lives within the cloistered walls, is entirely removed from the effects of advertising." This statement by Borden highlights the impact of advertising on American life. The essential function of advertising is communication. Advertising has been variously defined. The winning definition in a contest sponsored by Advertising Age in 1932 pictured advertising as "dissemination of information concerning an idea, service, or product to compel action in accordance with the intent of the advertiser." One of the judges of this contest combined what he considered the best parts of several entries and defined advertising as "the printed, written, spoken, or pictured representation of a person, product, service, or movement, openly sponsored by the advertiser and at his expense for the purpose of influencing sales, use, votes or endorsement." The American Marketing Association officially defined advertising as "any paid form of non-personal representation of ideas, goods, or services by an identified sponsor." Advertising thus attempts to influence people by providing information or making favorable presentation of ideas or products. In a complex economy like that of the United States, consumers are far removed from the producers of most commodities available for consumption,

3Ibid., p. 1.
and cannot, through their own effort find out what goods are available and where they can be purchased. Advertising helps to provide the kind of communication necessary to guide buyers to sources of supply and aid them in the vital problem of choice making.

In recent years advertising has been severely censored. "It has been subject to much criticism, self abasement and general condemnation. The appearance of several books, mostly critical some defamatory, . . . has highlighted the controversy."¹ According to critics, advertising represents an enormous waste of the country's resources; it makes no significant contribution to the well being of an individual or society. It is argued that advertising is harmful to the free society, for it impedes free competition. Borden noted this fear expressed by certain economists. He mentioned, "certain economists complain that its (advertising's) extensive use involves undue costs and is a bar to free competition."²

On the other hand, advertising has its champions and defenders, too. They claim that it represents an economical means of exchange of information. The claim is also made that advertising lowers costs by making large scale production possible. Herbert West supporting this claim suggested that "almost invariably people have exaggerated notions of how much the cost of advertising is represented in any one purchase."³ In fact, it will be helpful to bear in mind that there are no absolute answers to many of the problems

²Neil Borden, op. cit., p. 2.
³Herbert West, "The Day Advertising Stopped," Speeches and Articles by Batton, Barton, Durstine and Osborne, Inc., p. 2.
raised by modern advertising. As Borden put it,

in attacking advertising and aggressive selling, critics often are attacking not advertising as such, but the capitalistic system. Obviously, if one's underlying economic philosophy favors distribution of goods and services by governmental allotment to consumers, then advertising and selling directed by men and actuated by profit appears unnecessary and even undesirable.¹

Advertising serves as a specialized intermediary between business firms, institutions, and persons with services, products or ideas and individuals who might benefit from the purchase or acceptance of such services, products or ideas. "Advertising thus performs the function of interpreting the want satisfying qualities of services, products or ideas in terms of needs and desires of consumers."² Advertising is supposed to sell, but the most effective approach to selling is through giving information, and applying persuasion geared to the needs and wants of people. By giving information and applying persuasion advertising hopes to influence the demand for a commodity. It is intended in this report to discuss how advertising may affect the demand curve of a firm for a product. Its effects on the elasticity of the demand curve for a product will be examined. Also, an effort will be made to discuss the effects of advertising expenditures on the volume of sales of the firm. Reference will be made to empirical studies.

It is intended to show how advertising costs may affect the cost curves of a firm in both the short period and long period. The changes in the quantity sold and changes in price due to changes in demand will also be

¹Neil Borden, op. cit., p. 4.
treated analytically with graphs. Reference will be made to empirical studies conducted by Borden and others. The effects of advertising upon a firm's demand, supply and cost curves will be discussed from a micro-economic standpoint.

Following this discussion the importance of advertising will be viewed from a macro-economic standpoint. Its effects on aggregate consumption and the importance of change in the consumption function to total economic activity will be discussed. Moreover, an attempt will be made to bring out the importance of advertising in the stabilization of business fluctuations.

Finally, an effort will be made to discuss the role to be played by advertising in the maintenance of future prosperity of the U.S. economy. The importance of effective consumption to keep up with the increasing productive ability of the U.S. economy will be discussed. Advertising has a direct bearing on consumption because "the key importance of advertising is that it is the activating force and the educational force needed to change people's desires and habits rapidly enough for us to utilize our growing productive ability."¹

It would be proper to point out some limitations of advertising while speaking of its influence on the buying behavior of consumers. These limitations should not be lost sight of. "The function of advertising is to help modify the basic perceptual processes of the consumer, so that he is

guided toward seeing and feeling a product in a given predictable way."\(^1\)
Advertising helps to build certain images and values and "yet values and images have no meaning outside of the experiences and outlook of the consumer as a personality and the consumer market as a social group."\(^2\) Consumer behavior is a result of interaction, cultural and social, between the individual and the society in which he lives. Thus the effectiveness of advertising would depend on the direction of existing undercurrents of social values. The mysterious case of the missing market reported in America's Tastemakers is a pointer.

In a Latin American nation, a dairy was established after careful economic investigation of the area as to feed, population, cost, cattle and so on. Millions of dollars worth of this dairy had to be scrapped after construction and its commencing production. Efforts in advertising and public relations were not spared. But the whole thing had to be written off only because the underlying social values of the consumers were neglected. The consumers in this area were traditionally bull-fight watchers and enjoyed it. If they drank the milk, that would make them half brothers of bulls. How can they then watch the brother bull being killed? So millions of dollars went down the drain. In the final analysis the influences of culture and private sensation modify and intermingle with the stimuli of advertising to achieve the final pattern of relationship between sellers' products, (or ideas and services) and the consumer.\(^3\)

Thus, advertising is but one force in molding consumption expenditures.

One of the aspects of American society which must be born in mind is its mobility. The common denominator of American society is its capacity for movement and change.

---

\(^1\) Irving White, "The Functions of Advertising in our Culture," The Role of Advertising, p. 195.

\(^2\) Ibid., p. 195.

\(^3\) American's Tastemakers, p. 24.
America's mobility is set forth in its significant dimensions . . . geographically across land and sea, in its occupational structure, in its educational systems, its changing family relations and ethnic composition, its intellectual and cultural life.1

This mobility is accelerating, and perhaps the greatest significance of our pervasive economic mobility is that when appealing new ideas and modes of living make their appearance, Americans in increasing numbers have the wherewithal to embrace them. It is here when we are witnessing an unparalleled flow of goods and services in ever widening variety, that advertising assumes importance in molding consumer expenditures.

The following general assumptions underlie our discussion of the effects of advertising on the demand, supply and cost curves of the firm. These assumptions set out below, provide the framework in which the effects of advertising on consumption and their relation to maintenance of future prosperity are discussed:

1. Free capitalistic economy, such as that of the United States, in which means of production and distribution are privately owned and operated.

2. Private initiative and private enterprise are relied upon to supply goods and services.

3. Free exchange of goods and services between members of society, without government compulsion or controls.

Summing up, the discussion that follows is undertaken within the framework of a dynamic system of free enterprise in which consumers are free to decide how to spend their income, in which businessmen are free to decide the direction and scope of their activities and free to set their prices for their goods and services, in which labor is free to bargain collectively or individually

---

1Ibid., p. 127.
as it desires, in which investors are free to place their funds in whatever enterprises they see fit, in which liberties of individuals, including the liberty to own and enjoy property, are safe-guarded by the state, and in which change and innovation are accepted as the normal expectation, the whole being subject to such restraints as imposed voluntarily by the community for the better protection of these several freedoms.¹

ADVERTISING’S EFFECTS ON DEMAND

"The sales of a firm may be affected not only by the merits and selling efforts of other brands in an arbitrarily defined product group, but also by the merits and selling efforts of all products that cater for the same, similar or complementary consumer demand."² In short, a market for a brand or commodity is not confined to physically similar brands, but includes all alternatives or substitutes that compete for consumers' attention or patronage.

The classical economists based their work, in the sphere of micro-economic theory either on the assumption of perfect competition or absolute monopoly. Thus, advertising or sales promotion as factors influencing demand were ruled out by definition. The theory of imperfect competition, or as Prof. Chamberlin termed it, the theory of monopolistic competition, gives recognition to conditions that exist in the world of reality. The assumptions stated below underlie this discussion of the effects of advertising on demand and the discussions of its effects on supply and costs of a firm.

¹Neil Borden, Advertising in Our Economy, p. 39.
²Ralph Harris and Arthur Seldon, Advertising in Action, p. 326.
These assumptions though simplifying are realistic:

1. Competitive goods ordinarily are not identical but differentiated. A good or service includes physical, psychological, time and space characteristics;

2. "Instead of consumers with perfect knowledge and definitely known demand, the market is generally made up of consumers whose knowledge is imperfect and whose demands are subject to influence."\(^1\) The inference is that (a) advertising (and other sales promotional effort) tends to affect the demand schedule for products, and (b) advertising costs are a part of the costs of supply;

3. The techniques of competition include advertising, merchandising and other non-price forms;

4. Instead of markets with a large number of sellers, none of whom has an appreciable effect on price, many markets are dominated by a small number of firms, each of which can affect the price;

5. The entrepreneur tries to optimize profits;

6. The consumer tries to optimize satisfaction. Satisfaction is used in a subjective sense.

Advertising tends to affect the demand for the product by spreading knowledge about the product, its qualities and the services it can render. According to Chamberlin, "buyers often do not know but are dimly aware of the existence of the sellers other than they habitually trade, or of goods other than those they habitually consume, they are ignorant of the qualities

\(^1\)Neil Borden, *Advertising in Our Economy*, p. 159.
of goods in themselves, compared with other goods and of prices asked."1 Advertising tends to increase a seller's market by spreading information about products on the basis of which consumer's choices as to means of satisfying wants are altered. It makes known previously unknown means of satisfying consumer's wants. This is equivalent to a change either in shape or in the location of the demand curve for the seller's product.

The spreading of the word via advertising affects the demand curve only if consumption patterns change as a result of advertising. Advertising by spreading knowledge tends to make the demand curve for the individual seller more elastic. In other words, at a lower price, demand for the product will increase by more than proportionate, depending upon the advertising outlay and the skill with which it is applied. Imperfect knowledge makes the demand curve for a product less elastic; advertising through offsetting imperfect knowledge makes the demand curve more elastic.

Turning to graphical representation, in Fig. 1, DD is the original demand curve. $\text{DD}_1$ is the shape of the demand curve that is hoped for after an advertising expenditure is incurred. $\text{DD}_1$ is more elastic than DD.

A change in the location of the demand curve to the right comes about when consumer acceptance is based primarily on product differences and knowledge of the product. By spreading the information about the qualities of the product, and by describing the utilities and services to consumers, the position of the demand curve could be affected. Certainly, new products and new varieties of old products would have virtually no market at all without selling outlays of this sort, for the simple reason that there may be little

Fig. 1. Changes in demand due to advertising.
prevalent information about them. Similarly, the markets for older better
established products could be increased but slowly and within narrow limits
if nothing were expended to make them known better and to enlarge the market.
Quality competition is stimulated by the possibility of informing a large
number of potential buyers, through advertising, of quality changes or of
the existing attributes of a product about which they do not know. If the
information provided is believed, wants are more effectively satisfied; if
not believed, they are less effectively satisfied. Moreover, utility does
not entirely depend on the physical attributes of the product. As Menger
put it, "utility is nothing inherent in goods and not a property of goods
but merely a relationship between certain things and men."¹ In either case
when the wants are effectively satisfied or less effectively satisfied, the
satisfaction of existing wants is sought with different information at the
disposal of the buyer. As Chamberlin stated, "the effect of advertising is
to shift to the right the demand curve for the advertised product by spread-
ing of the knowledge of its existence, by describing it, and by suggesting
the utilities it will provide the purchaser."²

In addition, advertising affects demand by altering the wants them-
selves. It may activate potential demand. "Argumentative or 'reason why'
advertising at least purports to make the minds of readers recognize
rationally a need for the product, to see to it that it will satisfy the
need as far as he is concerned, and to take the action to acquire it."³

¹Quoted by Vincent Norris in "Advertising and Value Added," in C. H.
Sandage and Vernon Fryburger, The Role of Advertising, p. 150.
²Edward Chamberlin, Theory of Monopolistic Competition, p. 119.
Often, and particularly in the case of new products, consumers are unaware that the product might fill certain desires or needs. Advertising informs consumers what the product will do for them. The demand is affected by another factor, namely familiarity. "Advertising which merely displays the name of the brand or trademark or manufacturer's name may convey no information, yet if this name is made more familiar to the buyers, they are led to ask for it in preference to unadvertised, unfamiliar brands."¹ As a result, demand for the advertised product may increase.

In Fig. 1, DD₂ shows the shift in the demand curve upward and to the right. In essence this would mean larger volume at the same price. "At each price, more of the commodity can be sold; for each amount, the price at which this amount would just be taken off the market is higher."² Advertising increases the demand for the product, that is it enables the seller at whatever price he decides, to dispose of more than he could without it.

The extent of any effect on the elasticity or shift in the demand curve would, however, depend on the particular product advertised and its characteristics, and/or how effective the appeal was. It would depend on the appeal made to the public by the copy, color, or the media used in advertising; it would also be dependent upon the advertising effects produced by competing brands in the same industry and in other industries competing for consumers' dollars. The outcome of advertising would depend, in the last analysis, on the direction of the existing undercurrent of social values.

¹Edward Chamberlin, Theory of Monopolistic Competition, p. 119.
²Ibid., p. 130.
Advertising can slow down or accelerate the tempo of change, but cannot prevent it. The latent needs (potential demand) must be present; advertising serves merely as a force to speed up consumption of the products. "Changing consumption patterns, coming from a rapidly changing world are stronger than advertising efforts to mold and shape consumers' habits."1

Bearing these limitations in mind we shall turn to some factual evidence on advertising's effects on demand presented by some empirical studies.

We shall here borrow from the empirical findings of Neil Borden who conducted research on the effects of advertising on the demand for certain products. The data collected by this research is quite informative. In the case of cigarettes he reported that "some investigations have reached the conclusion that consumer cigarette choice is chiefly determined by advertising."2 He mentioned the interesting case of the Phillip Morris Company, when reporting on the effects of advertising. The Phillip Morris Company launched its new blend of 15 cent per pack cigarettes in January, 1933. Since the start, the company has made advertising one of the chief elements in its successful program of building demand for its brand, reported Borden. With increased advertising financed out of earnings, traceable expenditures of Phillip Morris by 1939 exceeded $1,500,000. By 1940 Phillip Morris was firmly entrenched in fourth place in the competitive race in the cigarette industry. What makes it so significant is the fact that Phillip Morris was launched on the market at a firm 15 cent retail price when the leading brands were selling at 12½ cents a package. Shortly

1Neil Borden, Advertising in Our Economy, p. 47.
2Ibid., pp. 58 and 60.
thereafter leading brands reduced wholesale cigarette prices and they later sold at 10 cents and 11 cents in retail chain stores, but Phillip Morris' retail prices were held at 15 cents.

In recent years, Ralph Harris and Arthur Seldon presented evidence gathered on a wide variety of firms in their book *Advertising in Action*. The firms covered are from a wide variety of industries including banking, finance, insurance, business and domestic machines, electrical appliances, confectionaries, and so forth. One very interesting case reported by them illustrating the effects of advertising on demand is that of Kleenex tissues.

Kleenex tissues were first marketed in 1952 in the United Kingdom. At the time when other manufacturers were giving wholesalers a margin of 20 percent and retailers a margin of 33 1/3 percent, Kimberly-Clark offered margins of 15 and 25 percent respectively, and decided to use the difference to appeal to the consumer directly by advertising. Since then, reported the authors, "sales and selling costs as a whole have risen together. Advertising and sales promotion costs more than quadrupled between 1953 and 1960-61, from £50,000 to £213,000; sales value (and volume) went up nearly eight times. In terms of volume and value turnover, advertising costs fell by approximately 50 percent. In 1953, £2 were spent in selling two units at £20; in 1957-58 the figure was £1,10, and in 1960-61 little more than £1 had to be spent to sustain this volume of sales."

In the first years, Kleenex advertising was concentrated in newspapers. With passing years, television advertising increased rapidly; in 1960-61 it accounted for nearly 70% of the total advertising expenditures. The prices

---

of Kleenex tissues had not been raised since 1952, largely because increasing output produced economies of manufacture which reduced costs per unit. It may be noted that since prices generally were rising during this period, Kleenex tissues became cheaper in real terms. It is true, remarked the authors, that insofar as advertising helped to expand sales it also helped to reduce costs and prices. Expansion in sales may also have been brought about by improvements in the product and in the widening of assortment. Concluding, the authors noted "that in a few years Kleenex became the brand leader with two-thirds of the market, and it has held this share against intensive competition since the late 1950's. Advertising, it seems safe to say, has paid."\(^1\) These two, and numerous other, case studies mentioned by Ralph Harris, Arthur Seldon, and Neil Borden show that advertising plays a very important role in affecting the demand curve of some firms.

**ADVERTISING'S EFFECT ON SUPPLY AND COST**

Attention now shifts to the supply side of the problem. Selling expenses include expenses incurred in order to secure a demand or a market for the product. Prof. Chamberlin suggested another criterion, "of all the costs incurred in manufacturing and sale of a given product, those which alter the demand curve for it are selling costs, and those which do not are the costs of production."\(^2\) Restated, the costs incurred to adapt the product

---

\(^1\)Ibid., p. 86.

to the existing demand are costs of production. On the other hand, those costs incurred to adapt the demand to the product are costs of selling.

"Sales are a function of both price and advertising."1 While considering the effects of advertising, the price variable is assumed constant. The price is assumed to vary only as affected by advertising expenditures. The shape of the selling cost curve would be as shown in Fig. 2 by AA falling to the right. The initial expenditure per unit is heavy, at the beginning. It is high because people must be informed about the product and its attributes. The market for the product has to be formed. People must be persuaded to buy the product to satisfy their needs. The initial resistance to the suggestions may also be high. The force of habit is difficult to change, therefore, high initial outlay per unit is required to break through the habit barrier. The results achieved are frequently cumulative, i.e., that additional expenditure brings increasing returns and advertising expenditure per unit sold decreases. The gain is also made through attainment of economies of large scale. This is shown by the AA curve falling to the right.

As the potential markets become exploited, however, more intensive selling efforts will be necessary to increase sales. The cost per unit will go up after a certain point, and decreasing returns will set in. This is shown as raising the AA curve to the right at increased levels of output.

In Fig. 2, PP represents production costs and CC is a combined cost curve of selling costs and production costs. The distance between PP and CC is greater at lower levels of output, that is advertising expenditures are

1Ibid., p. 130.
Fig. 2. Operations of the firm in the short run period.
higher, proportionately. As more is produced and sold due to effective advertising, the unit cost of advertising decreases. After M, however, more has to be spent on advertising per unit as poorer markets are taken up and competition increases. Alternatively speaking, "the consumer may be persuaded to consume a larger amount of any commodity only by reducing correspondingly his consumption of other things."\(^1\)

Many production methods today need a very large fixed capital investment. Thus, for a small market the overhead cost per unit may be high. For most efficient use, the production process would require very large markets. As seen earlier, advertising helps to explore markets and activate the potential demand. The cost of output varies inversely with the volume of production. The economies of large scale production otherwise known as internal economies allow a falling cost per unit of output. The production cost curve shown in Fig. 2 is PP. PP is falling to the right as a result of internal economies and external economies achieved due to the increase in the scale of production. CC, or the combined cost curve, is drawn by combining production and advertising costs.

In Fig. 2, the effects of change in demand and costs are shown. DD is the original demand curve for the product of a given firm. PP is the production cost curve of the firm. MC is the marginal cost curve, or the curve depicting cost of a marginal unit of production. MR is the marginal revenue curve derived by additions of revenue of marginal units sold. The equilibrium of the firm is achieved where MC = MR, i.e., that point where the marginal cost of producing one more unit just equals the revenue derived

\(^1\)Ibid., p. 135.
by its sale. Price at this point is $P_R$ and the quantity sold is $Q$; then advertising expenditure is incurred. The combined cost curve, $CC$, moves upward. The new marginal cost curve for a combined cost curve is represented by $MC_1$. The shape of the demand curve has changed. The changed demand curve is $DD_1$. $MR_1$ is the new marginal revenue curve. New equilibrium is established at $MC_1 = MR_1$. Price now is $P_R_1$ and quantity sold has increased to $Q_1$.

Another situation which may be brought about by advertising is presented in Fig. 3. Advertising may affect the demand curve in an entirely different way. That is, due to advertising efforts the entire demand curve may shift upward and to the right. The cost curves shown in Fig. 3 are the same, but $DD_2$ is superimposed. Demand curve $DD_2$ reflects the shift caused in the original demand curve $DD$ by advertising expenditure. $DD_2$ is higher and to the right of the original demand curve $DD$. $MR_2$ is the new marginal curve for $DD_2$. $MR_2$ intersects $MC_1$ at a higher point. The new equilibrium is at $MC_1 = MR_2$. Price now is $P_R_2$ and quantity sold has increased to $Q_2$.

Both of these figures (Figs. 2 and 3) reflect a short run situation. The short period is defined as one in which the capital investment remains fixed. The production facilities cannot be expanded to meet the increased demand caused by advertising. Extra labor must be hired at increased wages. Therefore, though some of the increased demand can be taken care of due to the excess capacity that generally exists, more can be produced only at higher costs. This is due to higher wages and also the diseconomies of scale that set in, such as more wear and tear of capital. The increased costs of additional output may result in higher prices. In other words, increasing marginal cost would be reflected in a higher, if possible, price unless the
Fig. 3. Shift in the demand curve of the firm.
seller cuts his profit margin. In Figs, 2 and 3, PR_1 and PR_2 are higher than PR. The composite picture of the change in the shape of the demand curve and the effects of a shift in the demand curve, are presented in Fig. 4.

In many firms, planned capacity is greater than the demand immediately facing a firm. Figure 5 depicts the situation of a firm operating with excess capacity. Unless the firm is operating in a full employment economy, additional labor can be hired at going wages. In such a situation advertising by shifting the location of the demand curve upward and to the right can help the firm to operate at optimum capacity. The economies obtained by more efficient use of the plant can more than offset the costs of advertising. In Fig. 5 CC_3 is superimposed. In the beginning, the firm is working below capacity; DD is the original demand curve for the firm; the equilibrium is established where MC_3 intersects MR; the quantity sold is QQ_4 and price is PR_4. After advertising, the new demand curve shifts to DD_2; production is increased to meet the increased demand; costs fall as more efficient use is made of production facilities. As the excess capacity is being utilized, total cost per unit falls; CC_3 is flatter to the right. The new equilibrium is established where MC_3 cut MR_2; the quantity sold is at QQ_5; the price is PR_5. The price PR_5 is lower than PR_4. The new lower cost was reflected in lower prices. The quantity QQ_5 sold now is greater than QQ_4.

In the long run, however, the cost curves would be different. This is because new capital investment in plant and equipment could be made. The scale of production can be expanded. Labor will have time to adapt to new skills, and production would then be more efficient. The long run cost curves would become flatter as the plant expanded. The shape of the marginal cost curve would change. It would be flatter to the right as marginal units
Fig. 4. Changes in elasticity and shift of the demand curve.
Fig. 5. Operation of the firm with excess capacity - short run.
could then be produced more cheaply. This would change the shape of the combined cost curve CC. In Fig. 6, DD₂ is the reproduction of DD₂ in Fig. 3, but the cost curves are redrawn, flatter to the right, adjusted to more efficient production. CC₁ is the new combined cost curve and MC₂ is the new marginal cost curve for CC₁. A new equilibrium point is established at MC₁ = MR₂. The quantity sold now is Q₃ and price is PR₃. PR₃ is lower than PR₂ and the quantity sold has increased to Q₃. The increase in quantity sold from Q₂ to Q₃ is the effect of a fall in the price from PR₂ in Fig. 3 to PR₃ in Fig. 6. The lower costs being reflected in the lower price.

On the factual side, evidence as to advertising costs as a percentage of sales is introduced. Exhibit 1 (see Appendix) is a tabulation compiled by "Advertising Age". This survey shows the percent of sales spent on advertising by companies grouped into 269 product classifications. "Advertising Age" reported "that the average percentage of sales invested in advertising by the companies covered was 1.13%, a figure that has not varied much in the five years that "Advertising Age" has prepared the annual tabulation."¹ The highest advertising expense (14.01% of sales) was incurred by the perfume, cosmetic, and other toilet preparation industry. The drug industry was next with 10.77%, while the soap and detergent industry expended 8.07% of sales on advertising. The beverage industries spent 4.89% of sales on advertising, and motion picture theatres spent 5.54%. One can go down the list of industries in a variety of product groups and discover that advertising costs as a percentage of sales were significantly low in most cases. Borden reported that in 1939 "most refrigerator manufacturers

Fig. 6. Operation of the firm - long run situation.
followed the policy of aggressive advertising to consumers, with advertising costs reported in the neighborhood of 5% to 7% of sales.\textsuperscript{1} Advertising expenditures for the refrigerator group have since fallen to 2.86%, as can be seen in Exhibit 1.

ADVERTISING'S EFFECTS ON CONSUMPTION AND ITS RELATION TO FUTURE PROSPERITY

The classical economists scarcely gave any importance to consumption as a field of special inquiry. On the contrary, Marshall disapproved of the special study of consumption. According to him, "economics from beginning to end is a study of the mutual adjustments of consumption and production. When the one is under discussion, the other is never out of mind."\textsuperscript{2} Consumption was assumed to be the ultimate goal of all economic activities, the end towards which all production efforts were directed. As Kyrk pointed out, "these early writers recognized consumption as the \textit{raison detre} of production, but having once pointed out the obvious fact, having assumed wants against which could be set the niggardliness of nature, economic inquiry ceased."\textsuperscript{3}

The above statements amply demonstrate that very little time or effort was expended in understanding consumption and its effect on total economic activities. This neglect of consumption was due in part to the fact that macro-economics was a later development. The synchronization and synthesis

\textsuperscript{1}Neil Borden, \textit{Economic Effects of Advertising}, p. 127.


\textsuperscript{3}Hazel Kyrk, \textit{A Theory of Consumption}, p. 13.
of economic theories had not been achieved at that time. Partly it was due to the fact that production problems were still unsolved. The demand for goods and services greatly exceeded the supply of them, and therefore, economists not faced with the problem neglected the consumption side.

The significant change in the attitude of economists towards consumption occurred with the publication of *The General Theory of Employment, Interest and Money* by Lord Keynes. He gave consumption an important place in his treatment of economic theory. Soon consumption came to be regarded as an important variable of national income. The relationship of consumption, business fluctuations, and advertising is of special significance insofar as advertising affects consumption. Keynesian terminology is used in the ensuing discussion. The term "Investment" means value of the current output of capital goods, plus the value of additions to work in progress or to stocks of finished goods. "Saving" is defined as being the difference between income and current consumption expenditure. In the words of Keynes, "income is equal to the value of current output, that current investment is equal to the part of current output that is not consumed, and that saving is equal to the excess of income over consumption."¹

In short,

\[
\text{Income (Y)} = \text{Value of output} = \text{Investment (I)} + \text{Consumption (C)},
\]

and

\[
\text{Savings (S)} = \text{Income (Y)} - \text{Consumption (C)},
\]

therefore,

\[
\text{Savings (S)} = \text{Investment (I)}.
\]

Stated mathematically,
since \( Y = I + C \)
and \( S = Y - C \)
also \( Y = S + C \),
therefore \( I = S \).

Since advertising is intended to affect consumption, the characteristics of consumption will be considered. Consumption depends on income. Putting it algebraically \( C = f(Y) \) where \( f \) shows some functional relationship between income and consumption. Keynes specified this functional relationship as the propensity to consume. The propensity to consume could also be written \( \frac{C}{Y} \). Consumption depends on the attitude of individual members toward savings, spending, social institutions, organizations and the environment of which they are products; in short, on subjective factors. Except for changes in income, which affect the level of consumption and propensity to consume, other objective factors such as changes in the general price level and changes in interest rates are ruled out. In any case, "changes in consumption are nothing like so dependent on changes in the rate of interest as compared to changes in income."\(^1\) As for the subjective factors they are relatively stable in the short run, if not influenced by outside factors. Thus tastes, choices, and habits (both spending and saving) are considered relatively stable. In the short run, therefore, changes in consumption depend largely on changes in the rate at which income is earned, rather than on changes in the propensity to consume out of a given income. Mathematically \( dc = dy \).

Regarding those subjective factors which affect the amount of consumption out of a given income, Keynes stated that "the strength of all these motives (to spend and to save) will vary enormously according to the institutions and organization of the economic society which we presume, according to habits formed by race, education, convention, religion and current morals, according to present hopes and past experience, according to the scale and technique of capital equipment, and according to the prevailing distribution of wealth and the established standards of life."¹

The possibility is suggested that advertising may affect the propensity to consume.

Insofar as subjective factors remain stable, and the changes due to objective factors, like changes in prices, taxes and interest rates are ruled out, the major factor affecting consumption is change in income. As income rises, consumption will rise, but by smaller amounts. Mathematically

\[ 1 > \frac{dc}{dy} > 0 \quad \text{and} \quad \frac{dc}{dy} \] ¹

is known as marginal propensity to consume. With increases in income, the MPC tends to decline.

It would be helpful to introduce the concept of the multiplier, which is derived from the marginal propensity to consume. Keynes defined it as "a precise relationship, given the propensity to consume, between aggregate employment and income and the rate of investment."² The multiplier determines the total direct and indirect ultimate increase in income of a given increase

²Ibid., p. 113.
in investment. In other words, it predicts by how many times an increment in investment will be multiplied by causing consumption to increase and thus raising national income.

Mathematically:

\[ Y = C + I, \]

\[ dY = dc + dI, \]

\[ \frac{dY}{dI} = 1 - \frac{dc}{dY}, \]

and \[ \frac{dY}{dI} = \frac{1}{1 - \frac{dc}{dY}} = k, \] the multiplier.

Since \[ \frac{dc}{dY} = MPC, \]

then \[ k = \frac{1}{1 - MPC}. \]

Supposing MPC is \( 4/5 \) then \( k = 5 \). Putting it the other way \( k \) is the reciprocal of the marginal propensity to save.

\[ k = \frac{1}{1 - \frac{4}{5}} = 5 \]

According to the multiplier effect, one unit of investment times the multiplier generates a given number of units of income; the number of units is dependent upon the size of the multiplier. With successive increases in income, however, marginal propensity to consume falls. In other words the marginal propensity to save increases. Thus in an affluent economy, such as that of the United States, the gap between saving and consumption widens. Since \( S = I \), more and more investment is needed to bridge that gap to keep income from falling. This is because a reverse multiplier relationship also holds true, i.e., the fall of one unit of investment will curtail income and employment by some multiple of the multiplier.
In this discussion of the consumption function and the multiplier theory, the effects of time lags and leakages are avoided for the purpose of simplification.

The statistical evidence of decreasing consumption expenditures on necessities, and increasing discretionary purchasing power has been provided by the German statistician, Engel. Chart I shows that with an increase in the income, the money spent on basic necessities as a proportion of the increase tends to fall. More income is now available to spend on other items, or to save. If a community with discretionary purchasing power at its command decides to save rather than to absorb the produced goods, investment must fall with resultant declines in income and employment.

Advertising, as we have seen earlier, can be used to stimulate the propensity to consume. Also, the marginal propensity to consume can be favorably affected. Subjective factors like tastes and habits tend to change, and advertising can accelerate the tempo of change so that the increase in the productive capacity of society can be fully utilized. The change in the consumption pattern of society from lower to higher standards of living, (resulting in an increase in the propensity to consume and greater marginal propensity to consume), could generate higher income from the same amount of investment due to a lower propensity to save.

A higher standard of living, or a greater propensity to consume, acts to minimize the severity of a recession. The downward change in standards of consumption is difficult. The resistance to change in altering the established habits and customs is greater in a downward direction. In a slump, with a very high level of consumption, "rock bottom" is reached below which

consumption cannot fall, and recovery could begin with the slightest increment in investment. Hicks defined "rock bottom"¹ as that level of consumption prevalent in the society, which is considered absolutely minimum and necessary, given the habits, taste and customs prevailing at the time, below which the level of consumption cannot fall. If in a slump, \( Y = C \) where \( C = 1 \), the value of \( k \) is \( \infty \) as \( \frac{dY}{dl} = k \cdot dl \) only a small investment is needed theoretically to bring recovery. Hicks calls this "raising of the floor", and after reaching it, economic activity must take an upturn.

Advertising can, by influencing the consumption standards of society, help to stabilize the economy. A. Hansen stated that "unless we base our economy on the foundation of mass consumption, the structure will not be stable."² In modern communities the consumption function tends to be too low; the savings function too high. Under the modern economic system a disproportionately large volume of current savings tends to be generated at high income and employment levels. Moreover, there is the tendency for individuals at all levels of income to save some amount from current income to meet contingencies. As a result, quoting from Hansen again, "rational and economically balanced disposition of income between consumption and savings is not made in an advanced modern economy. At continuously high levels of income no more savings should be generated than are required to take care of growth and technological change."³ Thus the importance of increasing the consumption function in the wake of a continuous increase in productivity and productive

¹J. R. Hicks, A Contribution to the Theory of the Trade Cycle, p. 23.
²Alvin Hansen, Economic Policy and Full Employment, p. 166.
³Ibid., p. 166.
capacity could hardly be minimized. Increasing consumption is as important to prevent disruption of the economic process as is investment.

It is very interesting to note the magnitude of discretionary purchasing power in the hands of American consumers. Arno Johnson described discretionary spending as "the surplus spending power over and above what would be required to supply the same per capita standards of living for the basic necessities of food, clothing and shelter." The increase in discretionary purchasing power has been stupendous. See Chart 2. The discretionary spending power increased from $86.3 billion in 1950 to $194.4 billion in 1962. The chart shows an increase of 125% in purchasing power in the hands of consumers between 1950-62 with the base year 1950. The estimated increase for 1968 is about 45% over 1962; in absolute figures the increase is estimated at $232 billion. Also, Chart 2 shows an estimated increase of 90% over 1962 by 1973, to $370 billion if the minimum production capacity of $870 billion is realized, and the price index is kept near 106 (base period 1950). The proportion of discretionary spending as a percentage of disposable income after taxes has risen from 42% in 1950 to 50% in 1962, and it is estimated to increase to 62% by 1973.

Chart 3 shows the population estimates and labor force as a percentage of population: 92 million or 40.7% of total expected population of 226 million (in 1973) will participate in the labor force. This level of employment, Johnson argues, can be justified only by a rapid expansion of markets to utilize the increased production of goods and services. This points directly to an upgrading of the standard of living as measured by total

---

DISCRETIONARY SPENDING POWER GROWTH
125% IN 1950-1962
OPPORTUNITY FOR 90% FURTHER GROWTH
IN 10 YEARS IN U.S.

BASED ON 1950 CONSUMER
CONCEPT OF STANDARD OF LIVING
FOR BASIC LIVING ITEMS

Chart 2.

U.S. NEEDS 20 MILLION NEW NON-AGRICULTURAL JOBS
BY 1973

Chart 3.
personal consumption of goods and services. "The educational force of selling and advertising will be required to encourage changes in habits and desires of consumers rapidly enough to provide needed employment of our increased labor force."\(^1\)

Chart 4 shows the opportunity for higher standards of living. The sale of goods and services need to be increased by about $200 billion to keep pace with increasing productive ability and employment needs. The estimated national income by 1973 will be of the magnitude of $870 billion. This is based on an annual gain in productivity of only 2.4% per capita. With an increase in educational opportunities and better educated workers, the productivity gains may be higher. According to Johnson "total college graduates increased from 3.9 million in 1940 to 8.4 million in 1961, and in the next ten years they should total 11.2 million—or nearly three times the number in 1940."\(^2\) This rapid improvement in the educational level will help to accelerate the upward movement in income groups in the next decade. "The Census Bureau analysis of income indicated that education is an important factor in America's increased productive ability."\(^3\) On the average, a person's income in 1961 stepped up with each step in the level of education. See Chart 5.

Even though the present consumption standards are higher in the U.S.A. than in many other areas of the world, they could be upgraded. The estimated

\(^1\)Ibid., p. 286.
\(^2\)Ibid., p. 288.
\(^3\)Ibid., p. 288.
$870 BILLION U.S. PRODUCTION BY 1973
ADDS $200 BILLION TO CONSUMER NEEDS
OPPORTUNITY FOR 56% HIGHER LIVING STANDARDS
(All in June 1962 Prices)

Chart 4.
HOW EDUCATION EXPANDS INCOME
1961 Median Average Income - Males Over 14
By Years of School Completed

increase in GNP to $870 billion by 1973 provides an opportunity for families
to move upward to higher income-brackets. Chart 6 shows the expansion in
real family income from 1950 to 1960. During this decade the number of families with real income over $10,000 increased by 167%. The number of families with real purchasing power between $7,000 and $10,000 jumped by 107% in the period between 1950-60. The total of families with over $5,000 of real purchasing power nearly doubled from 14.4 million (in 1950) to 26.4 million (58% of the total) in 1960; those families with under $5,000 real income dropped from 23.5 million to 19.0 million--a decline of 25%. The growth in median family income was 37%, from $4,093 (in 1960 prices) to $5,620 in 1960. The table given below shows how the increased productivity and productive capacity would expand personal income and purchasing power over the next decade 1962-1973:

<table>
<thead>
<tr>
<th>In Current Dollars (not corrected for inflation between 1940 and 1962)</th>
<th>Total Production (Billions)</th>
<th>Personal Income (Billions)</th>
<th>Households (Thousands)</th>
<th>Average Income Per Household (Before Taxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>$100.6</td>
<td>$78.7</td>
<td>34,949</td>
<td>$2,250</td>
</tr>
<tr>
<td>1950</td>
<td>284.6</td>
<td>228.5</td>
<td>43,554</td>
<td>5,250</td>
</tr>
<tr>
<td>1962 (2nd quarter)</td>
<td>552.0</td>
<td>439.5</td>
<td>54,200</td>
<td>8,100</td>
</tr>
</tbody>
</table>

Opportunity (in terms of June 1962 prices)

| 1963-64                                                       | $585.0                    | $470.0                    | 56,000                 | $8,400                                   |
| 1968 (in 5 years)                                             | 700.0                     | 565.0                     | 61,000                 | 9,250                                    |
| 1973 (in 10 years)                                            | 870.0                     | 690.0                     | 67,000                 | 10,300                                   |


The families moving upwards to higher income groups can take on greater physical consumption of many products. They could upgrade their diets, their
FAMILY REAL INCOME EXPANDING
REVOLUTIONARY CHANGE IN 10 YEARS 1950-1960

NUMBER OF FAMILIES OF 2 OR MORE
PERSONS IN EACH REAL INCOME GROUP
IN CONSTANT 1960 DOLLARS

1950

1960

167% WITH OVER
REAL INCOME

107% WITH
FOOD INCOME
REAL INCOME

43% WITH
FLAT INCOME
REAL INCOME

25% WITH
UNDER FOOD
REAL INCOME

MILLIONS OF FAMILIES (2 OR MORE PERSONS)

<table>
<thead>
<tr>
<th>FAMILY INCOME</th>
<th>1950 CURRENT</th>
<th>1950 FOOD</th>
<th>1960 CURRENT</th>
<th>1960 FOOD</th>
<th>% CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVER $20000</td>
<td>12</td>
<td>2.4</td>
<td>64</td>
<td>16.7</td>
<td>167%</td>
</tr>
<tr>
<td>$10000 TO $20000</td>
<td>2.4</td>
<td>4.4</td>
<td>9.1</td>
<td>1.07</td>
<td>107%</td>
</tr>
<tr>
<td>$5000 TO $10000</td>
<td>6.6</td>
<td>7.6</td>
<td>10.9</td>
<td>1.43</td>
<td>43%</td>
</tr>
<tr>
<td>UNDER $5000</td>
<td>30.7</td>
<td>25.5</td>
<td>19.0</td>
<td>-25%</td>
<td></td>
</tr>
<tr>
<td>TOTAL FAMILIES</td>
<td>399</td>
<td>399</td>
<td>454</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>MEDIAN INCOME</td>
<td>1,639</td>
<td>1,409</td>
<td>1,620</td>
<td>37%</td>
<td></td>
</tr>
</tbody>
</table>


Chart 6.
health and their homes as well as their cultural interests and leisure time activities. The changed pattern of consumer expenditures in 1961 relative to 1947 is shown by Chart 7. A change toward better family living and home life is reflected in the trend of consumer expenditures in the United States since 1947. Total personal consumption expenditures increased by 105% between 1947 and 1961. Consumer expenditures for foreign travel in 1961 were almost four times as great as in 1947. Expenditures for home use of gas, electricity and telephone and for owner occupied housing increased more than threefold. User operated transportation expenditures were three times greater. Education expenditures as a part of the improved living standards grew to a level over three and one-half times as great as in 1947, along with a rapid expansion of expenditures for TV, radio, records, musical instruments and reading materials. In the coming decade (1962 to 1973) about $200 billion will be added to discretionary purchasing power. To support an $870 billion production economy by 1973, and to avoid serious unemployment or under-utilization of resources, total consumption must be increased to about $595 billion. Thus, after making allowances for increased government expenditures and investment, personal consumption must be expanded by about 56% during the next decade if the productive ability of $870 billion is to be matched. The increased consumption potential of about $200 billion can vastly improve the standards of living of the masses. The expansion of latent demand can stimulate the increased productivity for profitable expansion of production.

Advertising can be very useful in activating the latent desires and potential demand for increased goods and services. The desires will have to be encouraged and activated by the educational forces of selling and advertising to overcome the "habit lag" or inherent inertia and resistance to
CHANGES IN CONSUMER EXPENDITURES SINCE 1947 REFLECT CHANGING HOME LIFE

Chart 7.

change or improvement. Therefore, selling and advertising must receive increased recognition as an educational and stimulating force needed to overcome the habit lag to change latent needs into insistent demand, and to build awareness of needs that are inherent in a better standard of living. The important role played by advertising is justly emphasized by A. Johnson. "The coming changes in our labor force and productivity accompanied by economic and social changes in the next ten years make the role of selling and advertising assume increasing importance in our economy. To provide the markets necessary for an adequate level of employment will require a consumption-oriented economy with a substantial upgrading of the overall standard of living."  

SUMMARY AND CONCLUSION

The purpose of this report was to evaluate the economic aspects of the effects of advertising from both micro-economic and macro-economic stand-points.

Dealing with the effects of advertising from a micro-economic standpoint, the procedure followed was to analyze the effects on demand, supply and costs of the firm for a product. Graphical representation was used in the analysis. Later, how advertising might effect an advanced economy was analyzed.

Given monopolistic or imperfect competition with product differentiation, advertising became an important basis for competition. The market being generally made up of consumers whose knowledge is imperfect and whose

\[1\text{Ibid.}, \ p. \ 290.\]
demands are subject to influence, the contention was that advertising expenditures tend to affect the demand for a product of the firm. Advertising tends to affect the demand for the product by spreading the knowledge about the product, its qualities and services it can render. It increases a seller's market by informing about the availability of the product previously unknown, on the basis of which the consumer's choice (as to means of satisfying wants) is altered. Also, potential demand for a new product is activated by telling what a product can do and what desires or needs could be satisfied by its use.

The effects of advertising on the demand curve are either to change the elasticity of the demand curve, or to change its location. Advertising by spreading knowledge makes the demand curve more elastic. Its effect is to shift upward and to the right the demand curve for the advertised product by giving information about its existence, by describing it, and by suggesting the utilities it will provide the buyer. Case histories were presented in support of these views. The extent of effects of advertising on the elasticity of demand or the shift in the demand curve would depend not only on the advertising expenditures and how effectively they were used, but also on the undercurrent of social values, habits, and various competing brands.

Advertising expenditures affect the cost curves of the firm. The initial cost of advertising per unit in the short period is high. In the short period supply could be increased only at higher costs to meet the increased demand. The increased costs may be reflected in an increased price in the short run. But in the long run, adjustments in the plant capacity can be made so as to earn economies of scale. Also, in the long run, the laborers will have time to adapt to skills and production would
become more efficient. The increased efficiency and economies of large scale production would lower the costs. Due to a larger volume of production, costs of manufacturing and advertising tend to be lower than otherwise would be the case. Exhibit 1 in the appendix shows the costs of advertising as a percentage of sales for companies grouped into about 269 product classifications.

The effects of change on aggregate consumer demand were analyzed from a macro-economic standpoint. Advertising tends to increase the propensity to consume. The increased propensity to consume is important in advanced economies because marginal propensity to consume being significantly lower, average propensity to consume tends to be low. As a result, the saving function tends to be too high. Advertising by increasing the propensity to consume tends to lower the dependence on other income variables, such as investment. Advertising helps to bridge the gap between savings and investment. Upgrading the level of consumption is important to maintain higher levels of income and employment in the future. Higher levels of consumption can act as a buffer in the case of a recession.

Advertising is only one of the forces molding consumer expenditures. Other variables like price, changing social values, additional income, expansion of population or change in its composition also affect the expenditures of consumers. The effects of advertising are difficult to separate and cannot be judged in isolation.
ACKNOWLEDGEMENTS

The author wishes to express his sincere appreciation for the helpful suggestions and constructive criticism offered by Professor A. Mulanax throughout the preparation of this report.
BIBLIOGRAPHY

Books


Periodicals


Hanson, A. "It's Scarcely a News," Advertising Age, Feb. 13, 1963, 32:3.


Nazar, P. "Consumption, not Production or Purchasing Power is Key to Economic Health," *Advertising Age*, Jan. 15, 1963, 34:3.


APPENDIX
Exhibit 1
EXHIBIT 1

Percentage of Sales Invested in Advertising in 1959-60
for 269 Separate Product Classifications

The following tabulation, compiled by Advertising Age, lists the average percentage of sales invested in advertising by companies in various product groups in the fiscal year ended in June, 1960. This unique compilation is based on tax returns reported to the Internal Revenue Service.

The average percentage of sales invested in advertising by the companies covered is 1.13%, a figure that has not varied much in the five years that Advertising Age has prepared the annual tabulation.

These figures provide an index of advertising investment for 269 product or service classifications. The basic information comes from 1,074,000 corporations, with ad expenditures in excess of $8.7 billion.

Information for some of the major classifications included in this report is available in the preliminary statistics for corporations for 1959-60, published recently by the IRS. In order to obtain breakdowns by more precise industry classifications, Advertising Age obtained permission to go behind the published materials and examine the source books:

Whereas the published statistics cover only 69 general industry groups, it has been possible to obtain accurate information for more than 200 additional sub-groups. In dozens of instances these additional breakdowns are of great significance to those who look for an indicator of advertising expenditure ratios.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Industrial Groups</td>
<td>1.13</td>
</tr>
<tr>
<td>Agriculture, Forestry and Fisheries</td>
<td>0.58</td>
</tr>
<tr>
<td>Mining</td>
<td>0.18</td>
</tr>
<tr>
<td>Metal Mining</td>
<td>0.03</td>
</tr>
<tr>
<td>Iron Ores</td>
<td>0.02</td>
</tr>
<tr>
<td>Copper, Lead, Zinc, Gold, Silver</td>
<td>0.02</td>
</tr>
<tr>
<td>Other Metal Mining</td>
<td>0.08</td>
</tr>
<tr>
<td>Bituminous Coal and Lignite Mining</td>
<td>0.09</td>
</tr>
<tr>
<td>Crude Petroleum and Natural Gas</td>
<td>0.20</td>
</tr>
<tr>
<td>Crude Petroleum and Natural Gas and Natural Gas Liquids</td>
<td>0.15</td>
</tr>
<tr>
<td>Oil and Gas Field Services</td>
<td>0.33</td>
</tr>
<tr>
<td>Nonmetallic Mineral and Anthracite</td>
<td></td>
</tr>
<tr>
<td>Broad Woven Fabric Mills, Cotton</td>
<td>0.56</td>
</tr>
<tr>
<td>Broad Woven Fabric Mills, Man-made Fiber and Silks</td>
<td>0.28</td>
</tr>
<tr>
<td>Broad Woven Fabric Mills, Wool Including Dyeing and Finishing</td>
<td>0.28</td>
</tr>
<tr>
<td>Narrow Fabrics and Other Smallwares Mills; Cotton, Wool, Silk, Man-made Fiber</td>
<td>0.27</td>
</tr>
<tr>
<td>Knitting Mills</td>
<td>1.06</td>
</tr>
<tr>
<td>Dyeing, Finishing Textiles, Except Wool Fabrics, Knit Goods</td>
<td>0.25</td>
</tr>
<tr>
<td>Floor Covering Mills</td>
<td>1.13</td>
</tr>
<tr>
<td>Other Textile Goods</td>
<td>0.42</td>
</tr>
<tr>
<td>Periodicals; Publishing, Publishing and Printing</td>
<td>0.51</td>
</tr>
<tr>
<td>Books</td>
<td>3.16</td>
</tr>
<tr>
<td>Commercial Printing, Manifold Business Forms, and Greeting Cards</td>
<td>0.68</td>
</tr>
<tr>
<td>Other Publishing, Book Binding, and Related Industries and Service Industries for Printing Trade</td>
<td>0.85</td>
</tr>
<tr>
<td>Printing, Publishing and Allied Industries, Not Allocable</td>
<td>1.22</td>
</tr>
<tr>
<td>Chemicals and Allied Products</td>
<td>3.79</td>
</tr>
<tr>
<td>Industrial Inorganic and Organic Chemicals</td>
<td>0.69</td>
</tr>
</tbody>
</table>
Mining ...................................................... 0.38
Stone, Sand and Gravel ............................ 0.32
Other Nonmetallic Minerals Including Anthracite .............................. 0.49
Construction ........................................... 0.23
General Building Contractors ................. 0.20
General Contractors, Not Building .......... 0.12
General Contractors, Not Allocable ........ 0.08
Special Trade Contractors .................... 0.37
Contractors, Not Allocable ................. 0.15
Manufacturing ........................................... 1.39
Beverage Industries ................................. 4.89
Soft Drinks, Carbonated Waters, Flavored Extracts, Syrups .......... 6.14
Malt Liquors and Malt ............................... 6.52
Wines, Brandy, Brandy Spirits .............. 5.05
Distilled, Rectified and Blended Liquors ... 2.08
Food, Kindred Products ......................... 1.92
Meat Products ........................................ 0.50
Dairy Products ........................................ 1.46
Canning and Preserving ........................... 1.86
Fruits, Vegetables and Sea Food ............. 2.75
Grain Mill Products ................................. 2.64
Bakery Products ..................................... 2.95
Sugar ................................................... 0.31
Confectionery, Related Products .............. 4.08
Vegetable Oil Mills and Animal, Marine, and Edible Fats and Oils ... 0.48
Other Food Preparations and Kindred Products ........................................ 4.78
Food and Kindred Products Not Allocable ........................................... 7.43
Tobacco Manufacturers ............................ 5.47
Textile Mill Products ............................... 0.62
Yarn and Thread Mills ............................. 0.60
Textile Mill Products Not Allocable .......... 0.46
Apparel, Finished Products Made From Fabrics, Similar Materials ................ 0.98
Men's, Youths', and Boys' Suits, Coats, Overcoats, Furnishings, Work Clothing, and Allied Garments ................. 0.89
Women's, Misses', Children's and Infants' Outerwear and Undergarments ... 1.12
Hats, Caps, Millinery, Fur Goods and Other Apparel and Accessories .......... 0.92
Other Fabricated Textile Products .......... 0.74
Apparel and Other Finished Products Made from Fabrics and Similar Materials Not Allocable ............................. 0.37
Lumber, Wood Products, Not Furniture .... 0.40
Logging Camps, Logging Contractors, Sawmills and Planing Mills ......... 2.78
Millwork, Veneer, Plywood, Prefabricated Structural Wood Products—Wooden Containers, Other Wood Products ........ 0.37
Furniture and Fixtures ............................ 1.22
Household Furniture .............................. 1.30
Office, Public Building, and Other Furniture and Fixtures .................. 1.05
Paper and Allied Products ..................... 0.84
Pulp Mills ............................................. 0.49
Paper, Paperboard Mills, Building .......... 0.49
Paper and Building Board Mills ............. 0.83
Paperboard Containers and Boxes .......... 0.22
Converted Paper and Paperboard Products ........................................... 1.40
Printing, Publishing and Allied Industries ... 0.76
Newspapers: Publishing, Printing and Printing ........................................ 0.23
Plastic Materials, Synthetic Resins, Rubber and Man-Made Fibers, Except Glass ............... 1.09
Drugs ................................................. 10.77
Soap, Detergents, Cleaning Preparations .... 8.07
Paints, Varnishes, Lacquers, Etc. ........... 1.52
Perfumes, Cosmetics and Other Toilet Preparations .......................... 14.01
Agricultural Chemicals ........................... 0.66
Gum and Wood Chemicals and Other Chemical Products ................... 1.07
Chemicals and Allied Products, Not Allocable ..................................... 3.39
Petroleum Refining and Related Industries . 0.46
Petroleum Refining ................................. 0.25
Paving, Roofing Materials and Other Products of Petroleum and Coal .... 0.82
Rubber and Miscellaneous Plastic Products, Tires and Inner Tubes ........ 1.64
Rubber Footwear, Reclaimed Rubber, and Other Fabricated Rubber Products .......... 1.91
Miscellaneous Plastics Products ......... 1.78
Leather and Leather Products ............... 0.89
Footwear, Except Rubber ....................... 1.12
Leather and Other Leather Products ........ 1.33
Stone, Clay and Glass Products ............. 0.75
Glass and Glass Products ..................... 0.70
Cement (Hydraulic) ............................... 0.94
Structural Clay Products ....................... 0.31
Pottery and Related Products .............. 0.69
Concrete, Gypsum, and Plaster Products .... 1.52
Cut Stone, Stone Products and Abrasives, Asbestos, and Other Nonmetallic Mineral 0.50
Primary Metal Industries ....................... 0.44
(Continued on Next Page)
<table>
<thead>
<tr>
<th>Industry</th>
<th>Per Cent</th>
<th>Industry</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blast Furnaces Steelworks and Rolling.</td>
<td>0.34</td>
<td>Watches, Clocks, Clockwork Operated Devices and Parts</td>
<td>5.35</td>
</tr>
<tr>
<td>Finishing Mills</td>
<td>0.30</td>
<td>Other Manufacturing Industries</td>
<td>1.84</td>
</tr>
<tr>
<td>Iron and Steel Foundries</td>
<td>0.32</td>
<td>Jewelry, Silverware, and Plated Ware</td>
<td>2.23</td>
</tr>
<tr>
<td>Primary and Secondary Smelting, Refining, Rolling, Drawing and Extruding of Nonferrous Metals and Alloys</td>
<td>0.70</td>
<td>Costume Jewelry, and Novelties, Except Precious Metal</td>
<td>0.93</td>
</tr>
<tr>
<td>Nonferrous Foundries</td>
<td>0.32</td>
<td>Toys, Amusements, Athletic and Sporting Goods</td>
<td>2.29</td>
</tr>
<tr>
<td>Other Primary Metal Industries</td>
<td>0.34</td>
<td>Manufacturing, not elsewhere classified</td>
<td>2.10</td>
</tr>
<tr>
<td>Primary Metal Industries, Not Allocable</td>
<td>0.28</td>
<td>Manufacturing Not Allocable</td>
<td>1.45</td>
</tr>
<tr>
<td>Miscellaneous fabricated wire and metal Products</td>
<td>0.84</td>
<td>Transportation, Communication and Other Public Utilities</td>
<td>0.42</td>
</tr>
<tr>
<td>Fabricated Metal Products, Not Allocable</td>
<td>0.68</td>
<td>Transportation</td>
<td>0.48</td>
</tr>
<tr>
<td>Machinery, Except Transportation Equipment and Electrical</td>
<td>1.05</td>
<td>Railroads</td>
<td>0.04</td>
</tr>
<tr>
<td>Engines and Turbines</td>
<td>1.66</td>
<td>Local and Suburban Transit</td>
<td>0.14</td>
</tr>
<tr>
<td>Farm Machinery and Equipment</td>
<td>1.18</td>
<td>Trucking and Warehousing</td>
<td>0.35</td>
</tr>
<tr>
<td>Construction, Mining and Materials</td>
<td>0.85</td>
<td>Other Motor Vehicle Transportation, Including Taxicabs, Intercity and School Buses</td>
<td>0.89</td>
</tr>
<tr>
<td>Metal Cans</td>
<td>0.51</td>
<td>Pipeline Transportation</td>
<td></td>
</tr>
<tr>
<td>Cutlery, Handtools and General Hardware</td>
<td>2.99</td>
<td>Water Transportation</td>
<td>0.42</td>
</tr>
<tr>
<td>Heating Apparatus (Except Electrical) and Plumbing Fixtures</td>
<td>1.11</td>
<td>Air Transportation</td>
<td>2.52</td>
</tr>
<tr>
<td>Fabricated Structural Metal Products</td>
<td>0.61</td>
<td>Transportation Services</td>
<td>0.75</td>
</tr>
<tr>
<td>Screw Machine Products, Bolts, Nuts, Screws, Rivets and Washers</td>
<td>0.59</td>
<td>Transportation Not Allocable</td>
<td>0.22</td>
</tr>
<tr>
<td>Metal Stampings</td>
<td>0.63</td>
<td>Communication</td>
<td>0.52</td>
</tr>
<tr>
<td>Coating, Engraving and Allied Services</td>
<td>0.44</td>
<td>Telephone (Wire or Radio)</td>
<td>0.47</td>
</tr>
<tr>
<td>Ordnance and Accessories</td>
<td>1.86</td>
<td>Telegraph (Wire and Radio)</td>
<td>0.78</td>
</tr>
<tr>
<td>Miscellaneous fabricated wire and metal Products</td>
<td>0.84</td>
<td>Radio, and Television Broadcasting</td>
<td>0.80</td>
</tr>
<tr>
<td>Fabricated Metal Products, Not Allocable</td>
<td>0.68</td>
<td>Communication Services, not elsewhere classified</td>
<td>1.02</td>
</tr>
<tr>
<td>Machinery, Except Transportation Equipment and Electrical</td>
<td>1.05</td>
<td>Electric and Gas Companies and Systems</td>
<td>2.44</td>
</tr>
<tr>
<td>Engines and Turbines</td>
<td>1.66</td>
<td>Electric and Combination Companies and Systems</td>
<td>0.23</td>
</tr>
<tr>
<td>Farm Machinery and Equipment</td>
<td>1.18</td>
<td>Gas Companies and Systems</td>
<td>0.27</td>
</tr>
<tr>
<td>Construction, Mining and Materials</td>
<td>0.85</td>
<td>Water Supply and Other Sanitary Services</td>
<td>0.12</td>
</tr>
<tr>
<td>Metalworking Machinery, and Equipment</td>
<td>0.94</td>
<td>Wholesale and Retail Trade</td>
<td>1.01</td>
</tr>
<tr>
<td>Special Industry Machinery (Except Metalworking Machinery)</td>
<td>0.83</td>
<td>Wholesale</td>
<td>0.59</td>
</tr>
<tr>
<td>General Industry Machinery and Equipment</td>
<td>1.07</td>
<td>Groceries, and Related Products</td>
<td>0.40</td>
</tr>
<tr>
<td>Office, Computing and Accounting Machines</td>
<td>1.08</td>
<td>Meats and Meat Products</td>
<td>0.07</td>
</tr>
<tr>
<td>Service Industry Machinery</td>
<td>1.37</td>
<td>Poultry and Poultry products, Fish and Seafoods, and Other Groceries and Related Products</td>
<td>0.44</td>
</tr>
<tr>
<td>Other Machinery, Except Electrical and Transportation Equipment</td>
<td>0.86</td>
<td>Electrical Goods, Hardware, Plumbing and Heating Equipment and Supplies</td>
<td>0.70</td>
</tr>
<tr>
<td>Machinery, Except Transportation Equipment and Electrical, Not Allocable</td>
<td>1.22</td>
<td>Electrical Goods</td>
<td>0.98</td>
</tr>
<tr>
<td>Electrical Machinery, Equipment and Electrical, Not Allocable</td>
<td>1.22</td>
<td>Hardware, Plumbing and Heating</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Percentage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplies</td>
<td>1.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Transmission and Distribution Equipment</td>
<td>1.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Industrial Apparatus</td>
<td>0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household Appliances</td>
<td>2.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Lighting and Wiring Equipment</td>
<td>1.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio, TV Receiving Sets, Except Communication Types</td>
<td>2.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Equipment</td>
<td>0.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic Components and Accessories</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Electrical Machinery, Equipment, and Supplies</td>
<td>1.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Machinery, Equipment, and Supplies</td>
<td>2.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation Equipment, Except Motor Vehicle</td>
<td>0.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aircraft</td>
<td>0.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aircraft Parts</td>
<td>0.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ship and Boat Building and Repairing</td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Railroad Equipment</td>
<td>0.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles, bicycles, and parts and other Transportation Equipment</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor Vehicles and Equipment</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor Vehicles, Car, Truck and Bus</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bodies and Truck Trailers</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor Vehicle Parts and Accessories</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional, Scientific and Controlling Instruments; Photographic, Optical Goods; Watches, Clocks</td>
<td>2.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering, Laboratory, Scientific and Research, Measuring and Controlling Instruments and Associated Equipment</td>
<td>1.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optical Instruments and Lenses, Surgical, Medical, and Dental Instruments, Supplies, and Ophthalmic Goods</td>
<td>3.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photographic Equipment, Supplies</td>
<td>2.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment and Supplies</td>
<td>0.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Wholesalers</td>
<td>0.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer, Wine and Distilled Alcoholic Beverages</td>
<td>1.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparel and Dry Goods</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drugs, Chemicals and Allied Products</td>
<td>2.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lumber and Construction Materials</td>
<td>0.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machinery, Equipment, Supplies</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor Vehicles and Automotive Equipment</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm Products (Raw Material)</td>
<td>0.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesalers, Not Elsewhere Classified</td>
<td>0.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesalers Not Allocable</td>
<td>0.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Trade</td>
<td>1.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Merchandise</td>
<td>2.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department Stores</td>
<td>2.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mail-Order Houses</td>
<td>8.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited Price Variety Stores</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandise Vending Machine Operators, Direct Selling Organizations, and Other General Merchandise Stores</td>
<td>1.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparel and Accessories</td>
<td>2.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture, Home Furnishings, and Equipment</td>
<td>3.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive Dealers and Filling Stations</td>
<td>0.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor Vehicle Dealers</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tire, Battery and Accessory Dealers, and Miscellaneous Aircraft, Marine and Automotive Dealers</td>
<td>1.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gasoline Service Stations</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eating and Drinking Places</td>
<td>0.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Materials, Hardware, Farm, Equipment</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Materials</td>
<td>0.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardware and Farm Equipment</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans, Law Offices</td>
<td>3.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lessors of Real Property, Except Buildings</td>
<td>0.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lessors of Mining, Oil and Similar Properties</td>
<td>0.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lessors of Railroad Property</td>
<td>0.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Lessors of Real Property, Except Buildings</td>
<td>1.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>2.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotels, Rooming Houses, Camps and Other Lodging Places</td>
<td>1.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Services</td>
<td>1.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laundries, Laundry Services, Cleaners and Dyers</td>
<td>1.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photographic Studios, Including Commercial Photography</td>
<td>3.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Personal Services</td>
<td>0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Services</td>
<td>0.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising</td>
<td>1.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Business Services</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive Repair Services and Garages and Other Repair Services</td>
<td>1.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Repair Services</td>
<td>0.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motion Pictures</td>
<td>3.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motion Picture Production and Distribution and Motion Picture Service Industries</td>
<td>2.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motion Picture Theaters</td>
<td>5.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amusements and Recreation Services, Except Motion Pictures</td>
<td>2.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Services</td>
<td>1.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature of Business Not Allocable</td>
<td>1.47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Except for life insurance, percentages shown for the “Finance, Insurance, Real Estate and Lessors of Real Property” category, and the 32 sub-groups under this main category, are percentages of total compiled receipts, which include interest, dividends, royalties, etc., as well as sales.
ECONOMIC EFFECTS OF ADVERTISING

by

MADHU N. DHARAWAT

B. A., St. Xavier's College, Bombay University, 1959
M. A., Department of Economics, Bombay University, 1961

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Commerce

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1964
The purpose of this report was to evaluate the economic aspects of the effects of advertising, from both micro-economic and macro-economic standpoints.

Dealing with advertising's effects from a micro standpoint, the procedure followed was to analyze its effects on demand and costs of the firm for a product, with graphical representation of the analysis. The effects of advertising on consumption in an advanced economy were analyzed.

The contention is that advertising expenditures affect the demand for the product of a firm. Advertising by spreading the information about the product, its qualities and its services affects the demand for that product. Also, potential demand for a new product is activated by telling people what that product can do, and what desires or needs could be satisfied by its use. The effect on the demand curve is reflected either in the changes in the elasticity of the demand curve or in a change in its location. The case histories presented strongly support this view. The use of large scale production methods is made possible by enlarged markets due to advertising. Due to a larger volume of production per unit costs of manufacturing and advertising tend to be lower than otherwise would be the case.

The effects of change on aggregate consumer demand were analyzed from a macro standpoint. Advertising by affecting the propensity to consume lowers the dependence on other variables of the income equation; it helps to bridge the gap between savings and investment. Upgrading of the level of consumption is important to maintain higher levels of income and employment in the future.

However, advertising is but one of the forces in molding the consumer's expenditures. The other variables like price, changing social values, national
income and expansion of population or changes in its composition also affect
the expenditures of consumers. The effects of advertising cannot be considered
in isolation.