break-even point among different product groups must come from differences in the values of the remaining terms. Hence, a higher value of either  $f_i(Y)$  or  $a_i$  will lower the break-even point, while a higher value of  $\alpha_i$  will raise it.

TABLE II

The Values of  $\alpha_i$  and  $\alpha_i$  for all Product Groups in 1963

	Percentage programmes sponsored by product group.	Television advertising expenditure per dollar of consumer spending.  a <sub>i</sub> , cents.
Food · · · ·	0·26 0·06	0.68 0.29
Automobile	0.08	2.88
House furnishings and equipment	t 0.04 0.05	0.49 1.90
Alcoholic beverages	0.02	0:12
Household operations.	0.12	1·29 1·16
Medical care	. 0·12 0·16	3.53
Personal care	0.02	0.22
Recreation and transport Others	. 0.07	0.19

Source: See Table I.

That is, the relative size of the net subsidy to a family is significantly affected by the slope of  $f_i(Y)$ .

The aggregate net subsidy for all families in a given income bracket for

a given product group can be obtained as follows:

$$S_{ij} = \int_{a}^{b} [C \{ \alpha_{i} g(Y) \} - a_{i} f_{i} (Y) ] \oint (Y) dY . \qquad (3.11)$$

where the jth income bracket covers all families with income of from a to b, and  $\phi(Y)$  denotes the distribution of families as a function of income.

Similarly, the aggregate net subsidy for a given income group can be computed for all product groups combined,

$$\sum_{i=1}^{n} S_{ij} = \sum_{i=1}^{n} \int_{a}^{b} \left[ C \left\{ \alpha_{i} g(Y) \right\} - a_{i} f_{i}(Y) \right] \phi(Y) dY \quad . \quad (3.21)$$

The Estimation Results and Interpretations

Net subsidies have been computed for two hypothetical families, one with a disposable personal income of \$3,000 and the other with \$10,000. The results are presented in Table III.

In 1963 a family with an income of \$3,000 viewed television programmes valued at \$34.21, while paying an equivalent of only \$21.20 in higher prices for advertised products. This leaves a net subsidy received on all product groups of \$13.01, or 38% of the benefits received. The comparable figures No. 302.—vol. LXXVI.