

## CHAPTER X

\*\*\*

\*\*\*

## HOUSEHOLD EXPENDITURES ON DURABLES

=====

A study of the consumption pattern of the affluent section would be incomplete without an investigation of the durables purchased by it as they form one of the most striking indicators of their high level of living. As such they have been the subject matter of investigation by numerous researchers. A number of factors have been found to be of significance in influencing the purchase of durables. According to Schipper, ' the effect of recent discretionary ( liquid ) saving upon current durable expenditures is positive indicating that household's liquid saving in the recent past tends to promote current spending on durables. ' <sup>1</sup> The lagged effect of previous use of credit in determining subsequent behaviour in purchasing durable goods has been found by Fisher. <sup>2</sup> The supply position, i.e.

<sup>1</sup>L. Schipper, Consumer Discretionary Behaviour, Amsterdam : North-Publishing Company, 1968, p.37.

<sup>2</sup>Marguerite C. Burk, Consumption Economics, N.Y. : John Wiley & Sons, 1968, p.102. (Cited)

availability of durables in the market, is also an important factor as has been pointed out by Burk.<sup>3</sup> Other variables whose influence have been investigated are annual family income, changes in income over time, transitory income, attitude towards instalment buying, family size, recency of marriage etc.

In our present study the emphasis was primarily to investigate into the factors determining the consumption behaviour of the affluent group. As this group was being exposed to such an investigation for the first time great care had to be taken while eliciting information to ensure that their responsiveness and willingness to cooperate were not adversely affected. Data on disposable income and asset holdings in all forms were recorded in a structured form with broad ranges and the households had to merely indicate in which range their disposable income from all sources fell in, and the range in which their current net worth fell. For the same reason no stock taking of the durables in the family's possession was undertaken. As this was a cross-sectional study covering all aspects of consumption, it was considered adequate to limit the study of durables to recent purchases with which one could assess the effect

---

<sup>3</sup>Loc.cit.

of current income and family life cycle on short run

9) durable purchases. Hence the households were requested to furnish information regarding the durables purchased by them within the year preceding the date of the inquiry. The durables listed were : furniture, electrical appliances, utensils, car, motor cycles, scooters, cycles, freeze ( fridge ), ornaments, musical instruments, any others, and house. The respondents were also requested to indicate the mode of payment ( cash / instalments ). ( Excepting for two respondents all the other respondents had paid in cash ).

Out of the total one hundred and eightyfive respondents only one hundred and twentysix had spent on durables during the said period. The following table ( 10.1 ) shows the distribution of expenditure on durables according to the expenditure classes.

The total amount spent by the 126 households on durables for the one year period was Rs. 19,90,296 giving an average of Rs. 15,796. The Table 10.2 gives the break-up of the total into various items : for the sample divided into three broad income groups ( I : 650 - 1250 Rs. Aggregate household expenditure per month, II Rs. 1250 - 3050 and III, over Rs. 3050 ) :

Was this expenditure added to total expenditure used earlier as a proxy for income

**Table :10.1: Distribution of Mean Expenditure on  
Durables Per Household during One Year  
Prior to Date of Inquiry**

| Expenditure<br>Class (in Rs.) | No. of<br>Households | Percent of<br>Total Expendi-<br>ture on<br>Durables | Mean<br>Expenditure |
|-------------------------------|----------------------|---|---------------------|
| 1                             | 2                    | 3   | 4                   |
| 650 - 950                     | 3 (4)                | 1.7   | Rs. 8573            |
| 950 - 1250                    | 13 (19)              | 3.8   | 5862                |
| 1250 - 1550                   | 16 (30)              | 4.4   | 5454                |
| 1550 - 1850                   | 20 (26)              | 5.6   | 5554                |
| 1850 - 2150                   | 16 (28)              | 14.7  | 18255               |
| 2150 - 2450                   | 8 (11)               | 3.8   | 9572                |
| 2450 - 2750                   | 10 (13)              | 12.7  | 25326               |
| 2750 - 3050                   | 16 (18)              | 26.5  | 32895               |
| 3050 - 3350                   | 3 ( 4)               | 0.0   | 5067                |
| 3350 - 3650                   | 5 ( 8)               | 8.0   | 31954               |
| 3650 - 3950                   | 5 ( 8)               | 7.3   | 29062               |
| 3950 - 4250                   | 5 ( 7)               | 1.3   | 5021                |
| Over 4250                     | 6 ( 9)               | 9.4   | 31333               |

126? 120 (185)

Figures in brackets under Col. No.2 of Households  
indicate the Total Number of Households under each  
Expenditure Class

Table :10.2: Pattern of Expenditure on Durables ( Per Households ) for Three Broad Income Groups during the Year Preceding the Date of Inquiry

| Commodity                  | Group I          |        | Group II         |        | Group III        |        |
|----------------------------|------------------|--------|------------------|--------|------------------|--------|
|                            | (N = 52)         |        | (N=50)           |        | ( N = 24)        |        |
|                            | (Rs.650-1850)    |        | (Rs.1850-3050)   |        | (Over Rs.3050)   |        |
|                            | Agg.Monthly Exp. |        | Agg.Monthly Exp. |        | Agg.Monthly Exp. |        |
|                            | No.of            | Mean   | No.of            | Mean   | No. of           | Mean   |
|                            | House-           | Value  | House-           | Value  | House-           | Value  |
|                            | holds            | in Rs. | holds            | in Rs. | holds            | in Rs. |
|                            | purchasing       |        | purchasing       |        | purchasing       |        |
| Furniture                  | 29               | 502    | 20               | 1034   | 9                | 2192   |
| Electrical Appliances      | 7                | 1131   | 11               | 921    | 8                | 1673   |
| Utensils                   | 19               | 318    | 19               | 234    | 7                | 751    |
| Car                        | -                | 000    | 5                | 26200  | 5                | 24040  |
| Motor Cycle, Scooters      | 3                | 3333   | 2                | 4900   | 3                | 3528   |
| Fridge                     | 4                | 3925   | 7                | 5043   | 4                | 5075   |
| Ornaments                  | 11               | 2531   | 15               | 2528   | 7                | 2503   |
| Cycles                     | 3                | 2267   | 6                | 000    | 1                | 350    |
| Musical Instruments        | 3                | 190    | 2                | 264    | 2                | 125    |
| Any other (Misc. Sundries) | 8                | 365    | 6                | 711    | 1                | 400    |
| House                      | 6                | 35167  | 13               | 68769  | 5                | 62000  |

From the Table 10.2 it is evident that not all the respondents under each income group go in for the purchase of all the items listed. This is to be expected as some households

are likely to have already purchased some of the items, while others are yet to purchase or do not intend purchasing the item at all. This fact has to be borne in mind when we make generalizations regarding the preferences of the three income groups.

*frequency & unit value*

The following table shows the items ranked according to the order of preference shown by the three income groups based on the total number of households going in for the purchase of that item.

Table :10.3: Order of Preference in Durable Items  
For the Three Income Groups

| Item                  | Group I<br>(Rs. 650-1850)<br>Rank | Group II<br>(Rs. 1850-3050)<br>Rank | Group III<br>(Over Rs. 3050)<br>Rank |
|-----------------------|-----------------------------------|-------------------------------------|--------------------------------------|
| Furniture             | 1                                 | 1                                   | 1                                    |
| Electrical Appliances | 5                                 | 5                                   | 2                                    |
| Utensils              | 2                                 | 2                                   | 3.5                                  |
| Cars                  | 10                                | 8                                   | 6                                    |
| Motor Cycle/Scooter   | 9                                 | 9.5                                 | 6                                    |
| Fridge                | 7                                 | 6                                   | 8                                    |
| Ornaments             | 3                                 | 3                                   | 3.5                                  |
| Cycles                | 9                                 | 10                                  | 10.5                                 |
| Musical Instruments   | 9                                 | 9.5                                 | 9                                    |
| Any others            | 4                                 | 7                                   | 10.5                                 |
| House                 | 6                                 | 4                                   | 6                                    |

From the Table 10.3 it is clear that most households go in for furniture, utensils, and ornaments. Furniture which occupies the first place seems to have a high income elasticity as it maintains its rank even at high income level. Utensils also seem to be an item of importance under durables. A notable feature is that this affluent section places value on gold in form of ornaments. Though spending on ornaments may be viewed as a form of conspicuous consumption in western countries, in India ornaments are an inalienable part of Indian heritage for the womenfolk and possession of gold is still deemed as a source of financial security. In view of the fact that there were not adequate number of observations under any particular item such as furniture, car etc. the total durable expenditure of each household has been considered for determining the influence of the two main variables, i.e. family life cycle and aggregate expenditure ( taken as proxy for income ).

#### Family Life Cycle and Purchase of Durables

In western studies the ownership of durables has been found to be strongly influenced by income and net worth, but the influence of other, non-economic factors such as household size, age of the head, habitation, varied depending on the nature of the durables. Thus, Cramer found that family size influenced ownership of washing machine, age and habitation had effect on ownership of motor cars, while

habitation and family size were determining factors in ownership of television.<sup>4</sup> Morgan and others at the Michigan Survey Research Centre analysed cross-section data (1953) and found family life cycle an important factor not only in the purchase of durables, but also in determining which durables would be purchased.<sup>5</sup> In particular, according to Fisher, young families had a tendency to be heavy purchasers of durable goods even though they may have to be dissuade to do so, whereas older families make relatively few durable purchases.<sup>6</sup>

In the current study the family life cycle was defined as follows :

|                      |  |
|----------------------|--|
| Beginning life cycle | - Between 23 - 35 Years ( Age of Head of Household ) |
| Expanding Stage      | - 36 - 45 Years                                      |
| Contracting Stage    | - 46 - 60 Years                                      |

To keep the influence of the variable income under control the durable purchasers were divided into three income groups based on their aggregate monthly expenditure, namely Rs.650-1850, Rs. 1850-3050 and over Rs.3050 and the means and variances

---

<sup>5</sup> Cited in Marguerite C. Burk, Consumption Economics, A Multi-disciplinary Approach, New York : John Wiley & Sons, Inc., 1968, p.100.

<sup>4</sup> J.S.Cramer, A Statistical Model of the Ownership of Major Consumer Durables, Cambridge : University Press, 1962.

<sup>6</sup> Cited in R.Ferber, Research on Household Behavior, New York : Macmillan, 1967, p.129.



calculated separately for the three life cycles under each income class. The following table summarises the figures on the durable expenditure.

Table :10.4: Expenditure on Durables per Household  
According to Family Life Cycle and Income  
(in 00s Rs.)

| Income Groups | N  | Beginning Stage |         | Expanding Stage  |         | Contracting Stage |         |
|---------------|----|-----------------|---------|------------------|---------|-------------------|---------|
|               |    | Mean            | S.D.    | Mean             | S.D.    | Mean              | S.D.    |
| I             | 52 | 70.11<br>(N=19) | 163.182 | 27.72<br>(N=16)  | 36.452  | 77.21<br>(N=17)   | 195.77  |
| II            | 50 | 24.75<br>(N=9)  | 25.302  | 140.35<br>(N=14) | 253.446 | 344.24<br>(N=27)  | 559.125 |
| III           | 24 | 241.50<br>(N=2) | -       | 191.95<br>(N=8)  | -       | 236.70<br>(N=14)  | -       |

Analysis of Variance test was applied to the three sub-samples in income groups I and II separately, taking life cycle as the independent variable. However no F-test was applied to the figures relating to the income group III since for this group there were only two observations in the beginning life cycle. Hence for this group the beginning and expanding stages were combined, keeping contracting stage apart, and t-test was applied to test the difference in the two means thus obtained. The following table 10.5 shows the results of the F-test ( Vide Appendix II for original data ).

**Table :10.5: Analysis of Variance Table ( Low Income i.e. Less Affluent) with respect to Family Life Cycle and Expenditure on Durables**

| Source of Variation | Sum of Squares | Degrees of Freedom | Mean Square | F <sub>obs</sub> |
|---------------------|----------------|--------------------|-------------|------------------|
| Between Groups      | 23620.28       | 2                  | 11810.14    | 0.729            |
| Within Groups       | 794242.07      | 49                 | 16209.02    |                  |
| Total               | 817862.35      | 51                 |             | 0.729            |

**Table :10.6: Analysis of Variance Table ( Middle Income i.e. Moderately Affluent) with Respect to Family Life Cycle and Expenditure on Durables**

| Source of Variation | Sum of Squares | Degrees of Freedom | Mean Squares | F <sub>obs</sub> |
|---------------------|----------------|--------------------|--------------|------------------|
| Between Groups      | 844030.38      | 2                  | 422015.19    | 2.21             |
| Within Groups       | 8968314.62     | 47                 | 190815.20    |                  |
| Total               | 9812345.00     | 49                 |              |                  |

Total Value of F (2,47,.05) = 3.195

The tests showed that family life cycle as a variable was not significant either for Group I or for Group II. The following table gives for Group III the mean and standard deviation for the two sub-samples formed, namely beginning + expanding, and contracting stages.

**Table :10.7: Mean and Standard Deviation of Expenditure of Households on Durables for Group III according to Life Cycle ('00s Rs.) i.e. (Highly Affluent)**

|                       | N  | Mean    | S.D.    |
|-----------------------|----|---------|---------|
| Beginning + Expanding | 10 | 201.859 | 330.643 |
| Contracting           | 14 | 236.696 | 366.901 |

The calculated t-value was less than 1 and hence not significant. Hence within the high income group there was no significant difference between the contracting stage and the earlier stage in the life cycle regarding expenditure on durables.

Thus, it seems that family life cycle has no significant influence on the expenditure on durables with respect to the affluent section. This may be partly due to the fact that instalment purchase is not quite popular in our country. ( This is reflected also in the fact that except for two cases all the durable purchases in the sample were on cash basis ). Again this may be the result of the widely prevalent custom in India that young married couples receive substantial gifts of durables from parents.

Income and Durable Purchase

Having found that family life cycle was not significantly associated with the purchase of durables in the affluent

section, analysis along similar lines was undertaken with regard to the variable income ( aggregate expenditure per month as proxy ). Schipper has stated :

'In the short run, income is relatively unimportant in explaining durable expenditure behaviour... The fact that income is not a dominant factor in short run durable expenditure is not surprising. A large number of accidental factors ( such as discounts, special credit terms, bargain sales, accidents etc.) along with factors associated with relative need or saturation with durables are more important in determining short run durable expenditure of households.'<sup>7</sup>

Indian studies have, however, shown that in India income is a significant variable in the purchase of durables.<sup>8</sup>

The following table gives the means and standard deviations of the outlay on this item in the three income classes.

Table :10.8: Mean and Standard Deviation of Total Expenditure on Durables in the Three Income Groups ('00 Rs.)

| Income Group | Mean    | S.D.    | N  |
|--------------|---------|---------|----|
| I            | 59.389  | 164.450 | 52 |
| II           | 229.648 | 447.495 | 50 |
| III          | 222.181 | 267.518 | 24 |

<sup>7</sup> Schipper, Consumer Discretionary Behavior, Amsterdam : North Holland Publ.Co., 1964, p.33.

<sup>8</sup> National Council of Applied Economic Research, All India Consumer Expenditure Survey, Vol.2, New Delhi, 1967, p.65.

The least affluent group I, has a mean expenditure of only about Rs.60 per household on durables, while groups II and III spend more than three times this amount. Since there were three sub-samples analysis of variance test was applied to find out if the three sub-samples could be deemed to have come from the same population or if there was significant difference between the sub-samples in the allocation on durables. If the calculated F-value was higher than the critical value it would mean that income was a determining factor having significant influence with regard to expenditure on durables.

The following table shows the result of the F-test.

Table :10.9: Analysis of Variance Table with respect to Income Level and Expenditure on Durables

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F <sub>obs</sub> |
|--------------------|----------------|--------------------|-------------|------------------|
| Between            | 861192.10      | 2                  | 430596.05   | 4.125            |
| Within             | 12937607.90    | 123                | 104390.78   |                  |
| Total              | 13698800.00    | 125                |             |                  |

Table Value of  $F(2, 123, .05) = 3.07$

$F(2, 123, .01) = 4.78$

The test shows that income is significant at 0.05 level only. Accepting that income was a significant determinant of durable purchases in this affluent section, attempt was

made to identify the income class which spent significantly more on this item. For this purpose t-test using pooled variance was done pairwise for the three income groups. Between group I and group II there was significant difference (  $t_{cal} = 2.55$ , greater than table value,  $t = 2.350$  at 0.01 level ). Similarly between group I and group III the difference was statistically significant (  $t_{cal} = 4.516$ , greater table value,  $t = 2.375$  at 0.01 level ). Between groups II and III however the t-value calculated was less than 1 and not significant.

The results suggest that durables fall in the category of those commodities which have a saturation level ( Type III , p. 157). This seems to suggest that the affluent section prefer to keep their major assets in liquid form rather than in physical assets or atleast do not give undue importance to physical assets. In this context we may refer to some of the interesting remarks of Katona.<sup>9</sup> He states that top asset holders are inflation conscious and their investment policy is deliberately directed towards the problem of hedging against inflation. At the same time they are interest conscious, as well as tax conscious. They devote time and energy to find ways and means to minimise income and estate taxes. In contrast to the middle income saver, the top asset

<sup>9</sup>G. Katona, The Mass Consumption Society, N.Y.: McGraw Hill, 1961, p. 212.

holders are concerned with leaving an inheritance to their children. Our findings are partly in agreement with the above remarks.

It is obvious that with a limited cross-section data, it is not possible to make a greater in-depth study of the purchase of durables, which merits a study by itself.

It would have been better  
to expand this analysis to major  
components separately.