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3. APRIL 1958 SURVEY

Introduction

One of the innovations introduced into the October 1957 survey was a request for volunteers for a research oriented questionnaire. Some 33,000 subscribers (out of about 125,000 who returned questionnaires) offered to participate. The volunteers were generally more highly educated and younger than the average CU member, although the differences were not great. The income distribution was about the same, except for the two highest brackets where the frequency of volunteers was somewhat smaller. The frequency of buying plans (except for new automobiles) was noticeably higher in comparable income groups for the volunteer sample, a difference apparently chiefly associated with the lower age, within given income groups, of the volunteers compared with the rest of the CU sample.

A special survey of the volunteer group was made late in March with five separate questionnaires mailed to random subgroups. The five differed mainly in the wording and time horizon of the buying plans question, and one also contained a different set of debt and asset questions. The number of questionnaires sent and the number returned (up to the middle of April) are given in Table 8. Most had been returned by April 6, the suggested deadline.

Of the 25,000 who replied, more than 90 per cent (about 23,000) indicated that they would be willing to answer future questionnaires carrying identifying reference numbers. Those who answered in April

TABLE 8
REPLIES TO SPECIAL QUESTIONNAIRE FROM VOLUNTEER GROUP OF
CONSUMERS UNION SUBSCRIBERS, APRIL 1958

<i>Questionnaire^a Type</i>	<i>Number Sent</i>	<i>Number Returned</i>	<i>Per Cent Returned</i>
A	7,069	5,447	77.1
B	7,069	5,317	75.2
C	7,069	5,233	74.0
D	7,068	5,288	74.8
E	5,000	3,848	77.0
Total	33,275	25,133	75.5

^aSee accompanying text for description.

Source: For this and other tables in this section unless otherwise noted basic data from Consumer Purchases Study, NBER.

were thus identified for reinterview—when the next survey was taken in October 1958.

Considerably more information than that gathered before from the Consumers Union group was obtained in the April survey. Detailed demographic data were requested—age, number of children, number of years married, and the like. Available for those households are a comprehensive picture of recent income experience and income prospects, and a fairly complete account of their debt-asset structure. In addition, several questions were asked about economic expectations, attitudes, and buying plans for some fifteen major household durables, for new and used automobiles, houses and house alterations. Data were also obtained for ownership of some eight durables, and for recent purchases of major household durables, cars, and houses.

The five different forms of the buying plans question, each sent to one of the subgroups, are designated by letters in the table. A and B were chosen on the basis of comparability with questionnaires used in previous CU surveys, with the same wording as questions in the October surveys of 1956 and 1957. C, D, and E were experimental, never having been used in our surveys. The questions asked and the format follow.

Questionnaire A

1. Which of the following products have you bought in the past 12 months or so? (Column 1)
2. Which of the following products do you plan to buy within the next 6 months? (Column 2)
3. Which of the following products do you plan to buy later? (Column 3)

Product (18 items listed)	Have Bought (1)	Plan to Buy	
		Within 6 Months (2)	Later (3)

Questionnaire B

1. Which of the following products have you bought in the past 12 months or so? (Column 1)
2. Which of the following products do you plan to buy over the next twelve months or so? (Column 2)

Product (18 items listed)	Have Bought (1)	Plan to Buy (2)
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Questionnaire C

1. Which of the following products have you bought in the past 12 months or so? (Column A)
2. and 3. Which of the following products do you plan to buy over the next twelve months or so, and how certain are you of these plans? (Columns 2 and 3)

	Have Bought	Definitely Will Buy	Probably or Possibly Will Buy
Product (18 items listed)	(1)	(2)	(3)

Questionnaire D

1. Which of the following products do you plan to buy over the next 12 months or so? (Column 1)
2. Which of the following products would you probably buy over the next 12 months or so if your household income during this period were to be 10 or 15 per cent higher than you now expect? (Column 2)
3. Which of the following products would you probably buy over the next 12 months or so if your household income during this period were to be 10 or 15 per cent lower than you now expect? (Column 3)

	Please fill in all three columns after reading questions 1, 2, and 3 above		
Product (18 items listed)	Plan to Buy		
	(1)	(2)	(3)

Questionnaire E

1. Which of the following products have you bought in the past 12 months or so? (Column 1)
2. Which of the following products do you plan to buy before next October? (Column 2)
3. Which of the following products do you plan to buy between October and a year from now? (Column 3)

		Plan to Buy	
	Have Bought	Before Next October	Between October and Year From Now
Product (18 items listed)	(1)	(2)	(3)

Aggregate Buying Plans and Purchases

The plan frequencies revealed in answers to the variant questions offer some clues to what information is actually obtained when a particular question is asked. Table 9 shows the aggregate frequencies associated with all variants, as well as the purchase frequencies covering the preceding twelve months.

Plans to buy elicited by an identical question asked in a slightly different manner appear in two places. The questions for Columns 1 and 11 are, What do you plan to buy within six months? (before October?), an identical time horizon since the questionnaires were sent out at the end of March and the six-month period goes through September. The frequency of responses to the "before October" question was higher than to the "within six months" question in slightly more than half the cases, and the differentials are all well within the limits of sampling fluctuations. The difference is so slight that it would not even warrant separation of the responses for analysis.

In contrast, the plan frequencies shown by Columns 4 and 8 are substantially different despite the identical wording of the question: "What do you plan to buy in the next twelve months or so?" Group B, Column 4, was asked only that question about buying plans. For Group D, that question was followed by others about buying plans in the event that expectations were not fulfilled—or were fulfilled, Column 8. For all except two commodities—furniture and refrigerators—the frequency of responses was lower in Column 8 than in Column 4. The probable reason for the difference is that respondents had a specific place to report doubtful or contingent purchase plans in questionnaire D but not in B. When the question was asked in isolation (Column 4), the only choices were yes or no. When the question was asked in conjunction with plans in the event of an unexpected income increase (Column 9), respondents would probably be inclined to report doubtful plans in Column 9 rather than in Column 8.

Comparison of definite plans to buy within twelve months (Column 5) with plans over twelve months in the event of unexpected income decreases (Column 10) is enlightening. The questions show the two lowest frequencies for buying plans, even though several other questions contained a shorter time horizon. The definite plan question has somewhat higher frequencies than the other for household durables, but about the

TABLE 9
 PERCENTAGE FREQUENCY OF PLANS TO BUY, REPORTED ON
 FIVE QUESTIONNAIRES, APRIL 1958

Commodity	A			B
	<i>Within 6 months (1)</i>	<i>Later (2)</i>	<i>(1)+(2) (3)</i>	<i>Next 12 months or so (4)</i>
Air conditioner, room	4.4	10.8	15.1	7.5
Air conditioner, house	1.0	6.0	7.0	1.9
Automobile, new	6.4	29.3	35.7	16.8
Automobile, used	3.8	9.4	13.2	8.2
Automobile, total	10.3	38.7	49.0	25.0
Camera, movie	2.1	6.4	8.5	3.6
Carpets and rugs (over \$200)	7.7	17.2	24.9	13.3
Clothes dryer, electric or gas	3.7	13.0	16.7	8.1
Dishwasher	2.0	9.4	11.4	4.8
Food freezer	1.8	11.4	13.2	5.4
Furniture (over \$100)	15.5	23.3	38.8	25.8
Garbage disposal unit	2.0	6.1	8.2	3.4
Hi-Fidelity (component or package)	7.2	17.7	25.0	14.9
Home heating system	2.8	4.0	6.8	3.1
Range, gas or electric	3.6	9.0	12.6	7.1
Refrigerator	3.9	10.8	14.7	7.3
TV set, black and white	4.3	9.3	13.6	8.9
TV set, color	0.5	10.6	11.1	2.4
Washing machine	4.8	9.4	14.2	9.5

same for automobiles.¹ Apparently a definite plan to buy has the connotation of "Will buy in the absence of real trouble," since it has roughly

¹A systematic understatement of plans may exist in answers to the unexpected reduction in income question. Many people obviously misinterpreted the question, since they checked one or two items under the question in Column 8 and nothing in either 9 or 10. It would not make sense to have fewer buying plans with a greater than expected income increase than if income changed by the expected amount. Hence, the questionnaires were edited to carry across to Column 9 all items that had been marked in 8 unless there was upgrading involved—a used car checked in 8 and a new car, but not a used one, checked in 9. No editing was done in Column 10. However, the original result suggests that some people interpreted Columns 9 and 10 to mean increments or decrements from what they had marked in 8. Thus, having checked two items in 8 and nothing in either 9 or 10 might have meant: "No change in plans even if income goes up or down unexpectedly"—which is possible, of course. If this were the case, proper editing should carry across all items marked in Column 8 to both 9 and 10, rather than only to 9.

TABLE 9, CONTINUED

C Over Next 12 Months or So			D Over Next 12 Months or So		
Definitely (5)	Probably or possibly (6)	(5)+(6) (7)	If Income is as expected (8)	If higher than expected (9)	If lower than expected (10)
0.7	2.4	3.1	1.2	5.4	0.4
5.7	16.1	21.8	14.3	32.9	4.6
2.5	8.2	10.7	7.9	10.4	3.6
8.2	24.3	32.5	22.2	43.3	8.2
1.2	5.3	6.5	3.3	10.1	0.5
6.1	10.7	16.8	12.8	24.9	3.7
3.0	8.9	11.9	6.9	15.5	2.3
2.0	5.2	7.2	3.5	10.2	0.8
1.5	6.8	8.3	3.5	11.9	0.7
13.7	17.4	31.1	26.2	41.9	9.4
1.3	3.3	4.6	2.1	6.1	0.5
4.6	12.3	16.9	10.9	23.3	1.9
1.6	2.5	4.1	2.4	3.9	0.5
2.8	5.3	8.1	6.0	10.1	2.6
3.1	7.1	10.2	8.2	13.0	3.7
2.8	9.1	11.9	8.3	13.8	1.8
0.5	4.0	4.5	1.3	8.9	0.3
3.8	7.7	11.5	8.5	12.5	3.8

the same frequencies as those for plans, if income were to be 10 or 15 per cent lower than expected. On balance, in the writer's judgment there is a rock-bottom minimum of contingent or uncertain plans contained in responses to the "definitely plan to buy" question.

This reasoning also suggests that all other ways used to ask the buying plan question evoke answers containing considerable proportions of contingent or uncertain plans, since without the word "definite" the frequencies run to five or more times as high. When asked about plans within six months (without qualification of the definition of "plan"), people reported more buying plans than when asked about definite plans, despite the fact that the time period was only half that of the definite question. Thus, even a horizon as short as six months must allow for many contingent or uncertain plans. The more we lengthen the time period or

TABLE 9, CONCLUDED

<i>Commodity</i>	E		PURCHASES
	<i>Before October (11)</i>	<i>Between October and year from now (12)</i>	<i>April 1957- April 1958 (13)</i>
Air conditioner, room	5.7	2.7	7.0
Air conditioner, house	0.8	1.7	1.5
Automobile, new	7.4	14.9	24.4
Automobile, used	3.9	4.3	12.9
Automobile, total	11.3	19.1	37.3
Camera, movie	2.3	2.7	5.6
Carpets and rugs (over \$200)	8.5	9.3	13.2
Clothes dryer, electric or gas	3.6	6.9	10.3
Dishwasher	1.6	2.8	4.4
Food freezer	1.9	4.3	4.6
Furniture (over \$100)	15.9	16.5	28.9
Garbage disposal unit	1.7	2.5	4.1
Hi-Fidelity (component or package)	6.3	9.8	15.5
Home heating system	2.5	1.8	4.8
Range, gas or electric	4.4	4.5	9.4
Refrigerator	4.1	4.5	11.0
TV set, black and white	4.5	6.4	14.6
TV set, color	0.5	4.0	0.5
Washing machine	4.9	6.7	14.3

Source: Basic data from Appendix Tables A-20 and A-21.

the more we request specifically contingent plans, the greater the amount of contingent or uncertain plans reported relative to the total.

Although we do not know yet what the frequency of actual purchases will be over the period, we can note the differences in order of magnitude between recent purchases and the various kinds of buying plans reported. Column 13 shows the frequency of purchases over the period April 1957-April 1958.² The percentages, much higher than almost any of the plan percentages, suggest either that a large proportion of contingent plans

²That purchases were substantially lower (20-30 per cent) than in any of the preceding several years bears out the notion that the fall off in durable goods sales during that recession was largely attributable to people whose incomes were substantially unaffected:

are carried out, or that a large proportion of purchases are unplanned.³ The only plan data that show frequencies of about the same order of magnitude as purchases are: (1) a combination of six-months plans and later plans; (2) a combination of definite, and probable or possible (within twelve months) plans; (3) a combination of plans before October and between October and a year from now; and (4) plans over twelve months if income is 10 to 15 per cent higher than expected.

The first category of data is unsatisfactory for analytical purposes until we know more about the meaning of later plans.⁴ The last category presupposes a condition that could not possibly be realized for all in the group that received questionnaire D. However, it may be an interesting question to examine for those who, in retrospect, report unexpected income increases of that amount. The third category appears to have been partly misinterpreted by many people, and is therefore suspect.⁵

For the second-questionnaire C, twelve-months plans, either definite or probable-possible—most items show plan frequencies smaller than were found for the previous year's purchases, although some are a bit higher. Commodities with lower plan frequencies are primarily items for which replacement constitutes the major source of demand. Of the seven items with April 1957–April 1958 purchases more frequent than definite plus probable or possible plans, every one is an item that almost all households in the group already possessed.⁶ Data from the October 1957 survey indicate that at least 65 per cent of CU households owned all these items (over 90 per cent owned automobiles); and that the nonowners are usually people whose living arrangements do not require ownership.

For the rest of the items, plans were higher than recent purchases. With the exception of furniture, carpets, and possibly high-fidelity sets, all the

³The high level of past purchases relative to plans hardly means simply that future purchases will be lower. It is typical of the data that purchase frequencies are high relative to plans, unless the plan question is very broad. See F. Thomas Juster, "Expectational Data and Short-Term Forecasting," unpublished Ph.D. thesis, Columbia University, 1956.

⁴This question, included in a previous survey in conjunction with the six-months horizon, was included in April because we wanted an exactly comparable question.

⁵The question was: "Which of the following do you plan to buy before October, or between October and a year from now?" The total horizon is exactly one year, and the combined plan frequencies should be the same or a little lower than the frequencies given in response to the question, "plans over the next twelve months or so." In fact the frequencies are all higher, and the differences could not be due to sampling error. A more likely explanation is that the phrase, "between October and a year from now" was misread by many people to mean a year from *then*, implying a total horizon of eighteen months.

⁶The seven are new cars, used cars, ranges, refrigerators, washing machines, black and white television sets, and home heating systems.

remaining items were not currently owned by most people, and a large part of demand was for new acquisitions. For the three exceptions, also, demand may well have been for new acquisitions rather than replacements, although the data cannot show that. It appears that, on the average, people are likely to underfulfill plans to buy items they do not have and would like to acquire, and likely to overfulfill plans to replace items they already have.⁷ This supposition awaits more thorough investigation with reinterview data obtained from this group.

Although it is not possible to draw firm conclusions from the data presented above, it does seem possible that what people actually purchase in the aggregate is better approximated by longer-horizon and less definite plans than by shorter-horizon and relatively firm plans. The very firm plans may reflect mainly factors that are specific to individual households—age, marital status, the advent of children, and so on—rather than factors that tend to influence many households in the same way at the same time, such as income changes or expected changes. The significance of this kind of difference is simply that the distribution of the first set of factors in the population is quite stable over fairly short periods of time. People in the aggregate do not become older or change marital status very rapidly. The second set of factors is capable of drastic and pervasive shifts over time within the population as a whole, and is more interesting from the viewpoint of making aggregate predictions.

April 1958 Survey Compared with Previous Surveys

Two major kinds of comparisons are possible between the April 1958 and the October 1957 surveys. Responses from the 1958 A group are directly comparable with the responses of the 1957 volunteer group; the buying plans questions is worded identically in both surveys, and the population from which both samples are drawn is identical, except for nonresponse bias.⁸ Table 10 summarizes the aggregate responses to the buying intentions question in the two surveys. It is clear from the data that six-months plans between the two dates has fallen for every item except used cars.⁹ The amount of the decrease ranges from a few per cent (re-

⁷Something of the same effect shows up between twelve-months-or-so plans (Column 4) and purchases. The twelve-months question is not specific about what is meant by plan, and in addition has an open end implication (twelve months *or so*).
⁸The only people who received the April questionnaire were those who had volunteered to do so in October; thus, except for the small nonresponse bias, the universes are identical.

⁹The fact that six-months purchase plans for room air conditioners were higher in April than in October is misleading, because of the previously noted strong seasonal pattern. A decline in plans can be inferred from the later plans, which fell between the two dates by more than 50 per cent. The item was excluded from subsequent analysis because of inability to make any good adjustment for the seasonal factor.

frigerators) to 40 per cent (the high-priced new cars); on the average, buying plans for household durables have fallen by a bit over 10 per cent, and for new cars by over 20 per cent. The 10 per cent decline shown for household durables may be somewhat less than would be shown by a different combination of items. Most of the items for which we have data are standard household durables, like stoves and refrigerators, which most of the households already own, and for which demand is mainly replacement and modernization. Other evidence suggests that buying plans for durables like dishwashers and clothes dryers—not owned at present by most consumers—are more volatile in their behavior and might have shown larger declines.

The problem of seasonal variation in the six-months buying plans is

TABLE 10

COMPARISON OF SIX-MONTHS PLANS AND LATER PLANS TO BUY AUTOMOBILES AND MAJOR HOUSEHOLD EQUIPMENT, OCTOBER 1957 AND APRIL 1958
(PER CENT OF SAMPLE PLANNING TO BUY)

Product	PLAN TO BUY WITHIN 6 MONTHS		Ratio of <i>April 1958</i> to	PLAN TO BUY LATER	
	<i>October^a</i> 1957	<i>April</i> 1958	<i>October 1957</i> <i>(6 months)</i>	<i>October^a</i> 1957	<i>April</i> 1958
Air conditioner, room	2.6	4.4	1.69	23.2	10.8
Automobile, new	8.7	6.4	0.74	23.5	29.3
Less than \$2,500	3.6	2.5	0.69	10.2	12.7
\$2,500-3,500	3.6	3.0	0.83	10.7	12.9
\$3,500-over	1.5	0.9	0.60	2.7	3.7
Automobile, used	3.2	3.8	1.19	6.3	9.4
Automobile, total	11.9	10.3	0.87	29.8	38.7
Food freezer	2.4	1.8	0.75	16.7	11.4
Hi-Fi, components or packaged	8.3	7.2	0.87	19.0	17.7
Range, electric or gas	3.8	3.6	0.95	12.9	9.0
Refrigerator	4.1	3.9	0.95	11.5	10.8
TV set	6.6	4.3 ^b	0.65	14.9	9.3 ^b
Washing machine	5.1	4.8	0.94	9.7	9.4

^aThe October 1957 plans shown above differ from those shown in Table 6. Table 6 gives six-months and later plans for the entire sample whether they chose to be reinterviewed or not. Two subsamples, each containing 10,000 observations, were drawn from all returned questionnaires—10,000 from the volunteers (those who elected to participate in future survey) and 10,000 from the nonvolunteers. Table 10 contains October 1957 data for the volunteer 10,000 sample only, since the April 1958 data were obtained from this same group.

^bBlack and white only.

Source: Appendix Tables A-19 and A-20.

potentially troublesome. Purchases of automobiles are seasonally high during a six-month forward period starting in April, while purchases of household equipment usually lag a bit during the same period.¹⁰ It is possible, but not proved, that plans follow the same seasonal pattern as purchases, in which case adjustment could easily be made. Some of the Survey Research Center data suggest that twelve-months-ahead buying plans may be low in the spring as compared to the end of the summer.¹¹ Since we have no reason to suppose that a seasonal low in six-months plans would exist for the reasons advanced for the low in twelve-months data, it seemed best to leave them unadjusted for seasonal variation until we know more about the problem.

The behavior of the later plans resists generalization. They rise for cars and fall for all the household items, leaving their meaning quite unclear. One might hypothesize that the automobile data mean that an unusually large number of people were tentatively planning to buy in the 1959-model year—people who had not bought during the past year and did not plan to until after the end of the summer. Alternatively, it may mean simply that a relatively large number of people had no definite purchase plans for the near future but were planning to buy a new car eventually.¹² Since the time horizon in the question is so indefinite and since we have no previous experience with these data, there is little choice between the two hypotheses.

The second major comparison involves the B group from the April survey and the October 1956 survey. The buying plans question in both carries a twelve-month horizon.¹³ Table 11 presents the comparisons, which indicate a sharp decline in twelve-months buying plans from the October 1956 level. On the average, the decline amounts to about 40 per cent for the household equipment items and about 30 per cent for new cars. All commodities except used cars and high-fidelity components

¹⁰The seasonal adjustments on new car registrations are taken from the National Bureau's business cycle series. No comparable data exist for the household equipment category. The seasonal factor for household durables was estimated from department store appliance sales compiled by the Department of Commerce and reported in the *Survey of Current Business*.

¹¹See G. Katona and E. Mueller, *Consumer Expectations, 1953-56*, Survey Research Center, University of Michigan, p. 60.

¹²The fact that later plans are as low as they are suggests that they do have some meaning as a measure of buying intentions, albeit a rather vague one—perhaps a reflection of prospective purchases that are thought to be within the realm of possibility in the foreseeable future.

¹³As noted above, the October 1957 survey did not include a question that could be compared with the twelve-months buying plans obtained from previous surveys.

TABLE 11

COMPARISON OF TWELVE-MONTHS PLANS TO BUY AUTOMOBILES AND MAJOR
HOUSEHOLD EQUIPMENT, OCTOBER 1956 AND APRIL 1958
(PER CENT OF SAMPLE PLANNING TO BUY)

Product	PLAN TO BUY IN NEXT 12 MONTHS OR SO		Ratio of April 1958 to October 1956
	October 1956	April 1958	
Air conditioner, room	11.6	7.5	0.65
Air conditioner, house system ^a	6.8	1.9	0.28
Automobile, new	23.2	16.8	0.72
Automobile, used	7.0	8.2	1.17
Automobile, total	30.2	25.0	0.83
Camera, movie	7.2	3.6	0.50
Carpets and rugs	18.2	13.3 ^a	0.73
Clothes dryer, electric or gas	13.3	8.1	0.61
Dishwasher	8.3	4.8	0.58
Food freezer	8.2	5.4	0.66
Garbage disposal unit	7.0	3.4	0.49
Hi-Fi, components or packaged	13.9 ^b	14.9	1.07
Home heating system	5.9	3.1	0.53
Range, gas or electric	10.0	7.1	0.71
Refrigerator	10.5	7.3	0.70
TV set	14.7	11.3 ^c	0.77
Washing machine	10.7	9.5	0.89

^aLimited to purchase of over \$100 cost.

^bHi-fi components only.

^cBlack and white TV sets were differentiated from color sets in the April survey. The figure in the table shows plans to buy both kinds while the October 1956 figure does not differentiate.

Source: Appendix Tables A-17 and A-20.

show a decrease; items that might be classified as luxury durables—air conditioners, garbage disposal units, dishwashers, and the like—tend to show somewhat larger declines than the others.

The evidence here seems to be clear cut: 1958 purchase plans for major durable goods were well below the levels of recent years. The major question is one of seasonal variation in the buying plans. What evidence we have—and it is very little—suggests that plans might be seasonally low in the spring. The explanation suggested for the seasonal influence concerns the time period people are likely to think about when asked for twelve-months plans at different times of the year. Katona and Mueller¹⁴

¹⁴*Op. cit.*

suggest that people are likely to look ahead to the remainder of the year—nine months or so—if asked in early spring, and to the entire next year—fifteen months or so—if asked in the fall. This hypothesis seems sensible, although that does not constitute its proof. Alternatively, one might ask whether there is any time of the year when households typically concentrate on financial planning, since the response to a question about buying plans is likely to be more complete in such circumstances. The period around the end of summer—after vacation and before the winter schedule begins, with return of children to school—may well have a claim to being a planning period, while the spring would not. This reasoning leads to the proposition that, if there is a seasonal in twelve-months buying plans, it is likely to have relatively high values in the fall and lower ones in the spring.

One additional source of bias, however, works in a different direction. The April sample was chosen from the special group of volunteer households; the October 1956 survey sample was a random choice among all subscribers who answered that year's questionnaire. Since we know (from comparison with the October 1957 survey) that, given comparable incomes,¹⁵ the volunteer group tends to have relatively more purchase plans than the random sample does, we can infer the same relationship between plans of the April 1958 sample and the October 1956 sample. On the other side, the April survey permitted no new entrants into the group that responded in October. For the population at large, new spending units were presumably being formed, and these are precisely the ones with the heaviest purchase rates. Given the short period—six months—between the two surveys, this bias does not appear serious, although it would become so over time if continual resurveying of the same group were undertaken. Since the two factors of seasonal influence and known sample bias tend to work in different directions, we have left the plans unadjusted. There is no guarantee that the biases will cancel out, but we have no better assumption to use.

Analyses of Changes in Buying Plans

In order to examine some of the characteristics of the decline in short-term buying plans between October 1957 and April 1958, the data have been grouped into homogeneous age-income classes. The income period reported in both surveys covered calendar 1958. Both household equipment and automobile plans were weighted and aggregated, and an estimate of the average dollar amount of plans per household was calculated

¹⁵See the first page of this section. There is little difference in income distributions between the two surveys.

for both categories. All household equipment items were weighted equally, since the six commodities for which we have data in both surveys all are priced in the same general range. Different weights were given to each of the three price ranges for new automobiles, and to used automobiles.¹⁶ For the specified age-income groups, we set planned expenditures of \$300 equal to unity, and present average expenditures for each group in terms of this convention. Thus, an average of 0.50 for the n^{th} age-income group would mean that, on the average, households in that group planned to buy \$150 worth of durables. The same notation applies to both household equipment and automobiles, so that the two are additive.

Age-Income Patterns

The samples from both the October and April surveys were split into fifteen age-income groups. Age and income variables have been found in previous studies to be among those most closely related to durable goods purchases.¹⁷ Our object here is to seek out *other* relationships in an attempt to determine what factors were related to the decline in plans (discussed in this section), and what factors were related to the level of plans in April 1958 and to purchases in the preceding twelve months (see the next section).

Tables 12 and 13 show the average level of six-months buying plans in October 1957 and April 1958 for household equipment, automobiles, and total durables.¹⁸ As noted above, the average levels are based on the convention that unity equals planned expenditures of \$300.

The data show the strong impact of age of household head on purchase plans for household equipment, and of income on automobile buying plans. These relationships, as well as those between the impact of income on household durables and of age on automobiles, do not appear to be

¹⁶Household equipment items were considered to cost an average of \$300 per item; we have buying plans in both surveys for food freezers, high-fidelity components, ranges, refrigerators, washing machines, and television sets. Plans to buy new cars in the under-\$2,500 price class were considered to represent a net average cost of \$1,200. Weights of \$1,500 and \$1,800, respectively, were given to new cars in the \$2,500-\$3,500 and the \$3,500-and-over price classes. Used cars were given a weight equal to an average net cost of \$600.

¹⁷J. B. Lansing and L. R. Klein, "Decisions to Purchase Consumer Durable Goods," *Journal of Marketing*, October 1955, p. 109. L. R. Klein, "Statistical Estimation of Economic Relations," *Contributions of Survey Methods to Economics*, L. R. Klein, ed., Columbia University Press, 1954, pp. 232-237.

¹⁸The data show new and used automobiles combined. Since the number of buying plans was about two or three times as great for new cars as it was for used cars, and since new cars have a greater unit weight in the aggregation, the figures reflect mainly plans to buy new cars.

TABLE 12
AVERAGE BUYING PLANS OVER A SIX-MONTH FORWARD PERIOD
FOR SPECIFIED AGE-INCOME GROUPS, OCTOBER 1957
(UNITY = PLANNED EXPENDITURES OF \$300)

Age Group ^a	INCOME CLASS					Total
	Under \$5,000	\$5,000- 7,499	\$7,500- 9,999	\$10,000- 14,999	\$15,000 and over	
<i>New and Used Automobiles</i>						
Under 35	0.29	0.42	0.48	0.58	0.97	0.45
35-44	.19	.42	.48	.60	.94	.52
45 and over	.17	.40	.48	.48	.81	.47
<i>Total</i>	.24	.42	.48	.55	.88	.48
<i>Household Equipment</i>						
Under 35	0.33	0.33	0.42	0.43	0.42	0.37
35-44	.24	.23	.32	.34	.36	.30
45 and over	.13	.18	.22	.24	.30	.22
<i>Total</i>	.26	.27	.34	.33	.34	.30
<i>Total Durables</i>						
Under 35	0.62	0.75	0.90	1.01	1.39	0.82
35-44	.43	.65	.80	.94	1.30	.82
45 and over	.30	.58	.70	.72	1.11	.69
<i>Total</i>	.49	.69	.81	.88	1.22	.78

^aAge head of household.

linear in all respects. For example, age appears to have some effect on car buying plans, but mainly in the lower-income classes. Above \$7,500 income, the effect is erratic and displays no particular tendency. Income, on the other hand, appears to affect household equipment buying plans mainly in the middle- and older-age categories; the relationship in the youngest age group is rather tenuous, particularly for the April survey.¹⁹

From these data we can get a rough notion of the structural characteristics, if any, of the October-April decline in short-term buying plans. Table

¹⁹It should be noted that the household equipment plans are heavily influenced by the commodity mix. The data shown above include only the commodities common to both the October and April surveys, since we were interested in a comparison of the two. But it excludes practically all durable goods other than the standard items that most households own—ranges, refrigerators, and so on. If the list of durables were extended, the statement above would require modification.

TABLE 13
 AVERAGE BUYING PLANS OVER A SIX-MONTH FORWARD PERIOD
 FOR SPECIFIED AGE-INCOME GROUPS, APRIL 1958
 (UNITY = PLANNED EXPENDITURES OF \$300)

Age Group ^a	INCOME CLASS					Total
	Under \$5,000	\$5,000- 7,499	\$7,500- 9,999	\$10,000- 14,999	\$15,000 and over	
<i>New and Used Automobiles</i>						
Under 35	0.30	0.28	0.26	0.47	0.67	0.33
35-44	.32	.27	.40	.61	.57	.43
45 and over	.21	.32	.51	.51	.62	.45
<i>Total</i>	.28	.29	.38	.54	.61	.40
<i>Household Equipment</i>						
Under 35	0.35	0.28	0.31	0.36	0.35	0.31
35-44	.15	.20	.27	.24	.28	.24
45 and over	.16	.22	.21	.22	.20	.21
<i>Total</i>	.25	.25	.27	.27	.25	.26
<i>Total Durables</i>						
Under 35	0.65	0.56	0.57	0.83	1.02	0.64
35-44	.47	.47	.67	.85	.85	.66
45 and over	.37	.54	.72	.73	.82	.66
<i>Total</i>	.52	.53	.65	.81	.86	.65

^aAge head of household.

14 shows the percentage change for each age-income group between the two periods, and the sample size for each group.

Two features of Table 14 should be noted. The decline in buying plans between the two periods was quite widespread; of the 15 groups, 12 showed a decline in plans to buy new automobiles, 12 a decline for household furnishings, and 10 a decline in aggregate plans. Two groups apparently did not follow the general pattern—the lowest (under \$5,000) income group and, to a lesser extent, the over-45 age group. The lowest income group shows increased plans for two of the three age groups in both major components of durables; the total shows an increase for all three age groups. For consumers over 45 the difference sometimes shows up as an increase in plans, while younger consumers with the same income showed decreases; and sometimes as a smaller decrease than that shown by the younger age groups. The age relationship is not completely syste-

TABLE 14
PERCENTAGE CHANGES IN SIX-MONTHS BUYING PLANS BETWEEN OCTOBER
1957 AND APRIL 1958 FOR FIFTEEN AGE-INCOME GROUPS OF
CONSUMER UNION SUBSCRIBERS

<i>Age-Income Group</i>	SAMPLES SIZES			PERCENTAGE CHANGE IN BUYING PLANS FOR:		
	<i>October</i>	<i>April</i>	<i>Ratio April to October</i>	<i>New Automobiles</i>	<i>Household Equipment</i>	<i>Total Durables*</i>
<i>Less than \$5,000</i>						
1 Under 35	665	277	0.42	-12	+6	+5
2 35-44	267	124	0.46	+62	-38	+9
3 45 and over	386	173	0.45	+55	+23	+23
<i>\$5,000-7,499</i>						
4 Under 35	1,543	709	0.46	-47	-15	-25
5 35-44	879	445	0.51	-53	-13	-28
6 45 and over	723	336	0.46	-24	+22	-7
<i>\$7,500-9,999</i>						
7 Under 35	1,037	496	0.48	-53	-26	-37
8 35-44	806	468	0.58	-32	-16	-16
9 45 and over	659	370	0.56	+2	-5	+3
<i>\$10,000-14,999</i>						
10 Under 35	538	291	0.54	-22	-16	-18
11 35-44	758	379	0.50	-9	-29	-10
12 45 and over	716	369	0.52	-7	-8	+1
<i>\$15,000 and over</i>						
13 Under 35	132	79	0.60	-29	-17	-27
14 35-44	346	187	0.54	-41	-22	-35
15 45 and over	463	251	0.54	-26	-33	-26
<i>Average</i>						
Under 35				-36	-16	-22
35-44				-29	-20	-20
45 and over				-8	-5	-4

*Includes used cars.

Source: Tables 12 and 13.

matic, but there is clearly some tendency in the direction of much smaller declines in the older groups.

The behavior of the lowest income group is rather unusual inasmuch as the people in it are in general likely to have the least favorable income experience. Members of CU in that income category have always shown unusual behavior, partly because CU subscribers who report relatively low incomes are likely to be people with large negative transitory components of income,²⁰ and partly because of the characteristics of CU membership. In general, consumers who are acquiring durable goods are more likely to be members of Consumers Union—a product testing organization—than other consumers are. The selectivity on this count is probably stronger in the lowest-income group than elsewhere, because the typical United States household at that income level is not a regular entrant into the durable goods market. If such a consumer joins CU when about to purchase and drops membership subsequently, and if this tendency is stronger in the relatively low-income groups, then we would expect any CU sample in that income class to be somewhat more biased than the same sample in other income groups.²¹

Our data enable us to examine a limited number of other relationships that might throw light on the reasons for the October-April decline in plans. Our analysis thus far has shown that plans declined for all but a few age-income groups, but that older consumers showed a much smaller decline in plans than younger ones. Also, we saw that the lowest-income group showed an increase in plans instead of a decrease. To what extent are these results related to (1) variations in income experience between October and April, and (2) variations in house buying plans (strongly related to purchase plans for durables)? These are the only relationships that can be tested since other questions included in the April survey were not asked in October. The tests will now be discussed.

Income Experience

Although the income experience of the Consumers Union sample was quite favorable, on the average, during the twelve-months period preced-

²⁰The terminology is taken from Milton Friedman, *A Theory of the Consumption Function*, Princeton for National Bureau of Economic Research, 1957.

²¹The relative sample size for October and April in different age-income groups, although quite closely matched throughout, shows a systematic income bias. There are relatively more April respondents in the higher income groups and relatively fewer in lower ones. This may reflect a tendency for households with more formal education—hence more income on the average—to respond to questionnaires more often than others; it may reflect a dropping from membership by a larger percentage of low-income October subscribers than of higher-income subscribers; or it may reflect a systematic bias towards underestimating income before the period is over compared to estimates made after the period.

ing both October 1957 and April 1958, it was substantially less favorable during the second of the two periods. Table 15 shows the percentage of the sample with given income experience for these two periods.

TABLE 15
INCOME EXPERIENCE OF CONSUMERS UNION SAMPLE IN TWELVE-MONTH PERIOD PRECEDING OCTOBER 1957 AND APRIL 1958
(PER CENT OF RESPONDENTS)

<i>Income Level Compared to That of Previous 12 Months</i>	<i>October 1957</i>	<i>April 1958^a</i>
Substantially higher (more than 20%)	8.9	5.4
Somewhat higher (5% to 20%)	47.0	37.3
Just about the same	34.6	42.5
Somewhat lower (5% to 20%)	7.0	9.6
Substantially lower (more than 20%)	2.0	4.3
Don't know	0.4	^b
Other (please specify)	^b	0.6
Not reported	0.1	0.3
Total	100.0	100.0

The question was not phrased identically in the two surveys. The October questionnaire read "appreciably higher (lower)" instead of "substantially higher (lower)" and did not include the suggested numerical range. This could distort the split between the two increase or decrease categories but could not alter total decreases and total increase. In addition the October "don't know" phrase was changed to "other (please specify)" in April.

^aThis computation was done from a sample of 4,267 questionnaires, somewhat fewer than the number included in the subsequent detailed analysis.

^bNot asked.

The relative decline in the extent of favorable income experience shows up in almost all the age-income groups, although certain of its characteristics suggest that it was closely related to the decline in buying plans. Table 16 shows income experience for all fifteen age-income groups in October and in April, making use of what is, effectively, an index of average experienced change for each group. We added together the number of people experiencing moderate increases and three times the number experiencing substantial increases; subtracted the decreases (treated in similar fashion) from the total; and divided the result by the total number of people in the group. The figure that emerges can be considered as an index of the average experienced change for the group.²²

²²It can be shown that the actual average experienced change for any age-income group is proportional to the index described above if: (1) the average magnitude of the changes in our qualitative categories is the same for both increases and decreases; (2) the average magnitude of changes in the "increased (decreased) substantially" category is three times as big as the average magnitude of changes in the "increased (decreased) somewhat" category; (3) people reporting "no change" or "don't know," or "other" experienced an average change of zero. These conditions seem reasonable.

TABLE 16

INDEX OF AVERAGE EXPERIENCED INCOME CHANGE FOR TWELVE-MONTH PERIODS PRECEDING OCTOBER 1957 AND APRIL 1958, FIFTEEN AGE-INCOME GROUPS OF CONSUMERS UNION SUBSCRIBERS

<i>Age-Income Group</i>	INDEX OF AVERAGE EXPERIENCED INCOME CHANGE		
	<i>October 1957</i>	<i>April 1958</i>	<i>Difference October-April</i>
1 Under \$5,000, under 35	+43	+37	-6
2 Under \$5,000, 35-44	+15	+15	0
3 Under \$5,000, 45 and over	-8	-18	-10
4 \$5,000-7,499, under 35	+79	+57	-22
5 \$5,000-7,499, 35-44	+45	+28	-17
6 \$5,000-7,499, 45 and over	+27	+13	-14
7 \$7,500-9,999, under 35	+105	+50	-55
8 \$7,500-9,999, 35-44	+64	+26	-38
9 \$7,500-9,999, 45 and over	+44	+12	-32
10 \$10,000-14,999, under 35	+107	+46	-61
11 \$10,000-14,999, 35-44	+75	+37	-38
12 \$10,000-14,999, 45 and over	+43	+24	-19
13 \$15,000-over, under 35	+98	+35	-63
14 \$15,000-over, 35-44	+76	+24	-52
15 \$15,000-over, 45 and over	+40	+6	-34

It is clear that relatively less favorable income experience was widespread, although only one group (the same one) in each period experienced an actual decline. It is apparent, however, that the difference in income experience is more pronounced for higher income consumers and for older consumers. Taking an unweighted arithmetic average²³ of the difference column in Table 16, we get the average of differences in index of income experience, shown in the tabulation below.

Income Group		Age Group	
Less than \$5,000	-5	Under 35	-41
\$5,000-7,499	-18	35-44	-29
\$7,500-9,999	-42	45 and over	-22
\$10,000-14,999	-39		
\$15,000 and over	-50		

²³Weighting by the number of observations in each cell would tend to reintroduce some age effects in the income averages, and vice versa. We are not interested in estimating population parameters, but in measuring the effect of one variable with others eliminated as much as possible. The unweighted average does this, except that sample errors are higher in some sets of age or income groups than in others, and hence the averages are of indeterminate and differing reliability.

TABLE 17
 AVERAGE LEVEL OF BUYING PLANS FOR COMPARABLE AGE-INCOME GROUPS
 WITH SAME INCOME EXPERIENCE, OCTOBER 1957 AND APRIL 1958
 (UNITY = \$300)

AVERAGE BUYING PLANS WHEN INCOME EXPERIENCE IN PRECEDING 12 MONTHS WAS:						
Product	<i>Higher</i>		<i>Same</i>		<i>Lower</i>	
	October	April	October	April	October	April
New and used automobiles						
15 groups	0.53	0.44	0.43	0.42	0.49	0.45
9 central groups	.50	.44	.44	.38	.48	.41
Household equipment						
15 groups	.30	.28	.27	.23	.28	.24
9 central groups	.31	.28	.28	.24	.29	.22
Total durables						
15 groups	.83	.72	.70	.64	.77	.68
9 central groups	.81	.72	.72	.62	.77	.63

The data represent unweighted averages for 15 and 9 age-income groups respectively. All groups with sample sizes of less than 10 were excluded. Only 1 out of 45 groups are excluded by this criteria since the increase and decrease categories were combined into one.

Sources: Appendix Tables A-32 and A-33.

On the basis of these results, one would be inclined to argue that differences in income experience between October and April account for some or all of the difference in buying plans (relatively less favorable income experience leading to fewer buying plans). This presumption is particularly inviting because those groups whose comparative income experience was least unfavorable also showed the smallest decline in buying plans—the low income group and the older consumers.²⁴

Further examination of our data does not bear this out, however. The proposition can be validated only if it can be shown that buying plans are related to income experience, and that people with similar income experience in both periods tended to have the same level of buying plans. If the former is true but the latter is not, then we must look elsewhere for the reasons behind the decline in buying plans.

Table 17 shows the average level of buying plans for comparable age-income groups who also had the same income experience in the two

²⁴The income experience data for this survey shows much the same age pattern as does data for the population as a whole. For example, see the 1959 Survey of Consumer Finances, reported in the *Federal Reserve Bulletin*.

TABLE 18

AVERAGE BUYING PLANS IN APRIL 1958 FOR HOUSEHOLDS WITH FAVORABLE INCOME EXPERIENCE COMPARED WITH BUYING PLANS IN OCTOBER 1957 FOR HOUSEHOLDS WITH UNFAVORABLE INCOME EXPERIENCE

<i>Age-Income Group</i>	AVERAGE BUYING PLANS	
	<i>October, 1957</i>	<i>April, 1958</i>
	<i>unfavorable experience</i>	<i>favorable experience</i>
15 Groups	0.77	0.72
Under 35 (5 groups)	0.66	0.79
35-44 (5 groups)	0.86	0.62
45 and over (5 groups)	0.76	0.75
9 Central Groups	0.77	0.72
Under 35 (3 groups)	0.67	0.73
35-44 (3 groups)	0.86	0.61
45 and over (3 groups)	0.79	0.83

Sources: Appendix Tables A-32 and A-33 (unweighted averages).

periods. Average buying plans for all fifteen groups are presented, along with averages for the nine groups in the income range between \$5,000 and \$15,000 per year. The latter contain a good deal less sampling error than the former, since we have eliminated both tails from the income distribution.

The above data seem to provide fairly conclusive evidence that less favorable income experience did not play much—if any—role in the decline in buying plans between October and April. There is not a very strong or systematic relationship between recent income experience and buying plans. People with favorable experience do seem to have somewhat more buying plans than the others, but people who have experienced income declines have more plans than people whose incomes were unchanged.²⁵

The lack of an aggregate pattern hides some quite systematic tendencies for certain subgroups, however. The recent income experience of younger consumers, for example, shows a fairly close relationship to their buying plans; the other two age groups do not show this pattern, and the pattern for the 35 to 44 age group seems to be perverse in both periods. Clearly, for any set of comparable income-age groups with the same income

²⁵The lack of a strong relationship here may be due to the fact that people with favorable income experience were adding to their stock of durable goods during the preceding period, and on that account have less demand for additional items.

experience there is every indication that, on the average, buying plans were systematically lower in April than they had been in October. One would expect them to be the same if a different pattern of income experience accounted for the over-all difference in plans. But, on the average, people with *favorable* income experience in April had about as many buying plans as people with *unfavorable* experience in October. Table 18 shows this comparison for a number of groups.

We are thus left with the proposition that the less favorable income experience of the sample from October to April could not have accounted for much of the difference in short-term buying plans. One must apparently look towards the future—or at other aspects of the past—in order to explain the decline.

House Buying Plans

The only other question of analytical interest that was asked on both surveys is about house buying or building plans. Unfortunately, somewhat different wording of this question prevents direct comparison. The structure of the plans is interesting, however, and some tentative comparisons are possible.

In the October 1957 survey, respondents were asked whether or not they were actively planning to buy or build a house at the present time. The only alternative answers were yes, no, or not answered. Some 16.6 per cent of the sample said they were actively planning to buy or build in October. Table 19 shows the percentage distribution of these people by age of household head, and income. The data show the strong impact of age on house buying plans. The income pattern, where the percentage of planners shows a decline at higher incomes, probably reflects the fact that relatively more of the people already own houses.

TABLE 19
PERCENTAGE OF CONSUMERS UNION SAMPLE PLANNING TO BUY OR BUILD HOUSES, BY AGE-INCOME GROUPS, OCTOBER 1957

<i>Age Group</i>	INCOME CLASS				
	<i>Under \$5,000</i>	<i>\$5,000-7,499</i>	<i>\$7,500-9,999</i>	<i>\$10,000-14,999</i>	<i>\$15,000 and over</i>
Under 35	15	21	26	25	21
35-44	13	15	16	19	18
45 and over	10	10	11	10	9

In the April 1958 survey results, we find what looks at first glance like a sizable decline in house buying plans (Table 20). Only 7 per

TABLE 20
 PERCENTAGE OF CONSUMERS UNION SAMPLE WITH
 HOUSE BUYING PLANS, APRIL 1958

	<i>Per Cent of Sample</i>
<i>Affirmative</i>	
Planning to buy or build:	
Within the next 12 months or so	7.1
Within the next few years	11.2
At some time in future, but don't know when	19.2
<i>Negative</i>	
No plans to buy or build	34.9
Too uncertain to guess	9.0
Other (please specify)	3.3
Not reported	15.3
Total	100.0

Based on 4,267 responses.

cent of the sample said that "they planned to buy or build within twelve months," a question that might be construed as broader than the 1957 question asking if "actively planning to buy or build at the present time," which was answered affirmatively by 16.6 per cent. It seems clear, however, that the inclusion of a number of alternatives in the 1958 questionnaire (against only one in the 1957 questionnaire) makes this comparison with the 1957 one misleading. It might make more sense to add April plans for within 12 months and within a few years to obtain comparability with the October question, though the procedure probably overestimates April plans. The age and income composition of these plans and of recent house purchases is shown in Table 21.

Both the house buying plan categories, parts A and B, show an internal pattern like that shown by replies to the differently worded question in October. The strong relationship to age is evident. The tendency for plans to decline in the higher income classes also shows up, although the April plans data behave more erratically.²⁶ The observations that are most

²⁶Sampling errors are somewhat larger in the April survey because the sample size is smaller than in October—about one-half. In addition, the ratio between the standard error of a percentage and the percentage itself tends to increase when the percentage becomes very small or very large, even though the standard error in absolute terms tends to become smaller. $\sigma_p = \sqrt{pq/N}$, where p is the percentage being estimated, $q = 1-p$, and N is the number of items in the sample. Thus, as p declines, pq also declines and σ_p declines. However, σ_p/p tends to increase since $\sigma_p/p = \sqrt{pq/N} \cdot 1/p = \sqrt{q/p} \cdot 1/N$. Thus, as p declines, σ_p/p tends to increase.

TABLE 21

PERCENTAGE OF CONSUMERS UNION SAMPLE PLANNING TO BUY OR BUILD HOUSES, OR HAVING BOUGHT HOUSES WITHIN THE PAST TWO YEARS, APRIL 1958

Age Group	INCOME CLASS				
	Under \$5,000	\$5,000- 7,499	\$7,500- 9,999	\$10,000- 14,999	\$15,000 and over
<i>A. Plan to Buy or Build Within 12 Months or So</i>					
Under 35	5.1	8.6	12.9	11.7	11.4
35-44	4.0	5.2	7.3	8.7	5.9
45 and over	9.2	3.0	4.9	4.3	6.0
<i>B. Plan to Buy Within 12 Months or Within Next Few Years</i>					
Under 35	20.6	26.4	27.8	28.9	26.6
35-44	11.3	17.3	15.4	18.7	15.0
45 and over	15.6	10.1	9.5	11.1	11.6
<i>C. Have Bought in Past 2 Years</i>					
Under 35	13.4	19.1	23.2	26.8	26.6
35-44	19.5	21.6	16.2	19.3	25.7
45 and over	6.9	11.3	11.9	13.8	8.0

out of line—the under \$5,000 and the \$15,000-and-over income classes for the over-45 age group—apparently reflect a relatively low level of recent house purchases (part C) by those people.²⁷

Neither of the two categories of April plans in parts A and B shows a clearly striking difference from the pattern shown by the October data. Thus, we cannot judge by the comparison which combination of April categories might be comparable to October's.

Some additional inferences can be drawn from the household durable goods buying plans, which are very closely associated with house buying intentions. As Table 22 shows, people who indicated some intention to purchase houses in the future had many more plans to buy household durables than the rest of the sample had; and their purchase plans for automobiles were not less than those of the rest. The strength of this complementarity between house buying plans and household durables plans is striking. In October (with a somewhat vague definition of plan), people who said they were actively looking had about twice the number

²⁷Adding parts A and C of the table gives a distribution of people who have either bought in the past two years or are planning to buy in the next year. The distribution is quite smooth for both age and income, showing a decline with increased age and an increase with higher incomes, except for the oldest age group.

TABLE 22

AVERAGE LEVEL OF SIX-MONTHS BUYING PLANS FOR MAJOR DURABLE GOODS
RELATED TO HOUSE BUYING PLANS OR RECENT HOUSE PURCHASES,
OCTOBER 1957 AND APRIL 1958
(UNITY = \$300)

	AVERAGE LEVEL OF PLANS FOR BUYING			
	<i>Household Durables</i>		<i>Automobiles</i>	
	<i>15-Group average</i>	<i>9-Group average</i>	<i>15-Group average</i>	<i>9-Group average</i>
October 1957 (actively looking for house to buy)				
Yes	0.52	0.49	0.56	0.51
No	.26	.26	.51	.48
April 1958 (planning to buy or build)				
Within 12 months	.67	.62	.46	.41
Within a few years	.25	.29	.67	.62
Don't know when	.26	.26	.48	.52
Don't plan to buy or build and haven't bought	.19	.19	.35	.33
Have bought within past 2 years	.25	.26	.35	.39

Source: The 15-group averages represent unweighted arithmetic averages of the buying plans for all age-income groups; and the 9-group averages represent the same for the central groups, excluding both tails from the income distribution. See Appendix Tables A-34 and A-35.

of buying plans for household durable goods than the others; they had about the same number of automobile buying plans—possibly somewhat more rather than less. In April, people who said they were planning to buy or build within twelve months had more than twice as many household durable buying plans as the rest had. People who were planning to buy in the next few years had somewhat more than people in any of the other categories, except for the twelve-month planners. Automobile buying plans were erratic and displayed no particular relationship to house buying plans or to recent house purchases.

In addition, it seems to be true that people who had neither bought in the past two years nor had any plans to buy or build at any time had noticeably fewer plans to buy either household durables or automobiles than the rest of the sample had. This could not be a stage of life-cycle phenomena, since the data are adjusted for age and income differences. It may represent the passing of the durable goods acquiring stage, which is not uniquely related to age.

With these data one might test the proposition that planning to buy a house either within twelve months or within the next few years (April) is roughly equivalent to actively looking for a house to buy or build (October). If it seemed reasonable that people with comparable house buying plans would, on the average, have comparable household durables buying plans in the two periods, we could test whether the two April categories, when combined, yield about the same average number of plans as the one October category. If they do, one might infer that the combined April categories are substantially equivalent to the October category.

In fact the averages are not equal. The two April categories show substantially fewer plans than the October category does. Using the 9-group average, we must combine 0.62 and 0.29. The appropriate weights are the respective sample sizes for people with house buying plans within twelve months and within a few years. The average comes out to be 0.42, which is considerably below the October figure of 0.49. Using the 15-group average makes the differences even greater. The inference could be that: (1) either the categories really are comparable, but the average number of household durables buying plans associated with house buying has fallen; or (2) the October question is narrower than the combined April questions, and only some of the people who checked the "within a few years" question would have answered yes to the October question.²⁸

It seems impossible to say how much of the decline in household durable buying plans between October and April is due to a fall in house buying plans, and how much is due to more general factors. It is clear that some of the decline is not associated with house buying, since the April categories that clearly consist of people who are not planning to buy a house show fewer plans than the "no" category in October. It seems likely, although not conclusive, that some of the decline is also related to a fall in general demand for home ownership.²⁹

²⁸By assuming that the average number of household durable plans for comparable prospective house buyers in October and April should be exactly 0.49 (the October figure), one could calculate how many people who were prospective buyers within the next few years in the April survey should be added to prospective buyers within twelve months in order to get an average of 0.49. It turns out that about one-half the people in the first category should be added to the second one, so that an inferred total of some 12 per cent would have answered the October question affirmatively if it had been asked in April. Over 16 per cent answered the question affirmatively in the October survey.

²⁹The April 1958 survey antedated most of the policy changes in mortgage down-payment terms, and in VA-FHA maximum interest rates. Such changes clearly have had some effect on total demand for mortgage and construction loans, but their effect on the survey's buying plans data cannot be estimated.