Consumer spending on durables and services in the 1980's

The past decade saw dramatic increases in expenditures for timesaving and entertainment-related goods and services, many of an electronic or electrical nature; much growth was spurred by women's increasing labor force participation

Maureen Boyle Gray

The 1980's have been described as a fast-paced, free-spending decade, a "decade of economic confidence and robust consumer spending."[1] Although much of the focus on the American economy has been about the shift from the production of durables to the provision of services, data on aggregate expenditures from the BLS Consumer Expenditure Survey show that these expenditures are divided fairly evenly between goods and services.[2] This article examines the pattern of spending of U.S. consumers on selected durables and services from 1980 through 1990. Among the various goods and services discussed are many that have come to play an integral—indeed, to some persons and families, perhaps indispensable—role in today's way of life: microwave ovens; videocassette recorders and associated sales and rentals of cassettes, tapes, and discs; personal computers and associated hardware and software; child care services; housekeeping services; and purchases of meals away from home. Expenditures on most of these items increased, in many cases dramatically, from 1980 to 1990, as the growth in labor force participation of women spurred a need for more time-saving devices and the peak earning years of baby-boomers provided the wherewithal to buy them.

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Description of the survey

The principal objective of the Consumer Expenditure Survey is to collect data that provide a continuous flow of information on the buying patterns of U.S. consumers. Originally conducted about every 10 years, the survey has been on-going since 1980.

The survey, which is conducted for BLS by the Bureau of the Census, consists of two components: a Diary, or recordkeeping, Survey completed by respondents for two consecutive 1-week periods and an Interview Survey in which the expenditures of consumer units[3] are obtained in five interviews conducted at 3-month intervals. Each component of the survey queries an independent sample of consumer units that is representative of the U.S. population. The Interview Survey selects participants on the basis of a rotating panel and targets approximately 6,000 consumer units each quarter.[4]

The Interview Survey is designed to obtain data on the types of expenditures that respondents can be expected to recall for a period of 3 months or longer. These include large expenditures, such as those made for property, automobiles, and major appliances, as well as expenditures that occur on a regular basis, such as rent, utility payments, and insurance premiums. Information on ownership of appliances also is obtained. The Interview Survey covers approximately 95 percent of all expenditures. All data presented in this article are from the Interview Survey. Characteristics of the household are also reported, so that expenditures can be related to them.

The mean expenditures shown in the tables, text, and charts of this article are calculated over the entire sample, regardless of whether a particular consumer unit reported an expenditure for that item. The data are weighted to represent the total population. Because not all consumer units purchased each item during the survey period, the average expenditure for an item is generally considerably lower than the actual expenditure made by those consumer units that purchased the item. The less frequently an item is purchased, the greater the difference between the average expenditure for all consumer units and the average expenditure of those purchasing the item. For instance, table 1 shows average expenditures of only $9 for microwave ovens in 1990, because relatively few consumer units actually purchased a microwave oven. The average cost for those who did make the purchase is closer to $200.

Table 1. **Average annual expenditures and percent of consumer units reporting expenditures for selected durable items, Consumer Expenditure Survey, Interview Survey, 1980–90**

Item	1980	1981[1]	1982[1]	1983[1]	1984	1985	1986	1987	1988	1989	1990
Microwave ovens:											
Expenditures	$14	$16	$20	$17	$24	$21	$20	$16	$14	$10	$9
Percent reporting	2.9	3.7	4.4	4.4	6.6	6.5	8.0	7.4	6.7	5.2	4.4
Sound components and component systems:											
Expenditures	25	25	21	23	20	30	29	27	28	26	30
Percent reporting	7.2	7.1	5.7	6.6	5.4	7.5	7.2	6.5	6.4	6.3	7.2
Records, tapes, needles, and compact discs:											
Expenditures	22	26	23	22	23	24	25	26	29	32	33
Percent reporting	23.9	24.3	22.4	22.4	22.3	22.0	20.1	20.2	20.6	21.7	21.3
Videocassette recorders and video disc players:											
Expenditures	6	10	22	20	42	53	50	48	47	41	44
Percent reporting	.7	1.6	2.4	3.2	7.1	10.9	11.5	11.4	9.8	8.3	8.8
Videocassettes, tapes, and discs:											
Expenditures	—	—	1	3	5	8	9	11	13	11	14
Percent reporting	—	—	.5	1.3	2.4	4.2	5.6	6.2	7.6	7.4	8.0
Televisions:											
Expenditures	60	59	66	67	69	67	72	67	68	69	74
Percent reporting	17.1	15.6	16.9	16.7	16.9	18.3	18.6	17.2	16.4	16.0	15.4
Telephones and accessories:											
Expenditures	—	—	4	10	9	5	8	8	11	14	14
Percent reporting	—	—	17.4	16.7	14.8	9.5	15.0	15.2	18.1	20.0	19.6
Telephone-answering devices:											
Expenditures	—	—	1	2	2	2	4	5	4	5	5
Percent reporting	—	—	.6	1.2	1.6	1.6	3.3	4.5	4.5	5.6	5.8
Computers and computer hardware:											
Expenditures	—	—	9	31	26	22	36	39	43	45	46
Percent reporting	—	—	.8	4.9	3.7	3.7	4.9	5.6	4.2	4.0	4.4
Video game hardware and software:											
Expenditures	—	—	21	17	7	4	4	7	15	18	17
Percent reporting	—	—	6.1	5.1	2.9	1.7	1.6	2.1	3.6	4.9	4.8

[1] Data for urban consumer units only. (Urban consumer units spend differently than rural consumer units; for further information, see John M. Rogers, "Expenditures of urban and rural consumers, 1972–73 to 1985," *Monthly Labor Review*, March 1988, pp. 41–45.)

NOTE: Percent reporting is a quarterly value and has been multiplied by 4 for all items except records, tapes, needles, and compact discs; videocassettes, tapes, and discs; and video game hardware and software because all remaining items generally are purchased only once per year. Dashes indicate data not collected.

Even if all consumer units purchased a particular item, an individual consumer unit may have spent more or less than the average for that item. Income, family size, age of family members, and geographic location are among the factors that influence expenditures. Even within a group of consumer units having similar characteristics, there may be significant variation because of individual needs, tastes, and preferences. Given all of these considerations, it is the changes or the trend in, and not the level of, mean expenditures that is analytically important for this article. Also important is the trend in the estimated percent of households reporting an expenditure for those durable goods and services that became popular during the 1980's.

Spending on durable goods

In terms of expenditures, the product life cycle for durable goods follows a pattern that is dependent on price and demand. Average expenditures are low and prices are high when a product is first introduced. Then, as the price of the product declines, purchases increase for a time and finally peak and level off, reflecting replacement and purchases made by newly formed households.[5] (Table 2 shows average household expenditures for selected durables in 1990 by age of reference person.)

Expenditures for new durable goods show expected patterns from 1980 to 1990. (See table 1.) Data on expenditures and percent reporting for microwave ovens, sound components and components systems, and videocassette recorders and video disc players follow the expected patterns. (See chart 1.) These durables are electronic goods that provide convenience or entertainment. In 1990, the percent of households that owned the following items was:[6] microwave ovens, 72 percent; sound component systems, including compact disc players, 58 percent; videocassette recorders and video disc players, 61 percent; personal computers, 15 percent.

The microwave oven has reduced the cooking time of many foods, which is helpful to households that view time as a limited commodity. The average expenditure on microwave ovens peaked in 1984 and has declined steadily since then. The percent of consumer units reporting expenditures for microwave ovens increased throughout the early 1980's and did not start to decline until 1986.

Related to the convenience cooking afforded by microwave ovens is an increase in the purchases of prepared foods over the past decade.[7] Average expenditures for frozen prepared foods increased 165 percent, from $23 (18 percent reporting) in 1980 to $61 (22 percent reporting) in 1990. Prices of these goods, as measured by the Consumer Price Index, rose 54 percent over the same period. Similarly, the 171-percent increase in average expenditures for selected canned and packaged prepared foods, from $41 in 1980 (34 percent reporting) to $111 in 1990 (43 percent reporting), was only partially due to prices, which rose 45 percent from 1980 to 1990. This implies not only that more households were buying prepared foods, but that individual households were buying more of such foods.

The compact disc player, which is included in sound components and component systems in the Consumer Expenditure Survey, was first introduced in 1983. Demand expanded considerably in 1985, as prices of compact disc players declined.[8] The average annual expenditure for sound components and component systems and the percent of households reporting the purchase of such systems peaked in 1985. (See chart 1, panel 2.) The Electronic Industries Association estimates that in June 1991, 28 percent of U.S. households owned a compact disc player.

Expenditures for records, tapes, needles, and compact discs have increased steadily since 1983. The percent of households reporting purchases of such items has decreased somewhat since 1980, but has been stable since 1985, despite the rise in

Table 2. **Average annual expenditures for selected durable goods, by age of reference person, Consumer Expenditure Survey, Interview Survey, 1990**

Item	All consumer units	Under age 25	Age 25–34	Age 35–44	Age 45–54	Age 55–64	Age 65 and over
Sound components/ component systems	$30	$57	$44	$34	$39	$7	$6
Videocassette recorders and video disc players	44	32	53	58	54	44	19
Computers and computer hardware	46	34	65	62	71	16	15
Microwave ovens	9	6	6	11	13	7	7

mean expenditures. This phenomenon may be attributed to the higher price of compact discs, compared with that of cassette tapes and records, and also to the fact that prices of compact discs have not fallen much from their high introductory level.[9]

The introduction of the videocassette recorder allowed television viewers the convenience of taping programs for later viewing. Videocassette recorders and video disc players also opened up a new market for the sale and rental of videocassettes, tapes, and discs.[10] (See table 3.) Purchases and rentals of these items increased throughout the decade. The average annual expenditure and percent of households reporting rentals of videocassette tapes were greater than the averages for purchases of videotapes and discs. Rentals were particularly popular among husband-and-wife families with children. (See table 4.) Parents of young children no longer had to pay for a babysitter in order to see a movie, and for families with older children, watching a videotape at home was a new form of family entertainment.

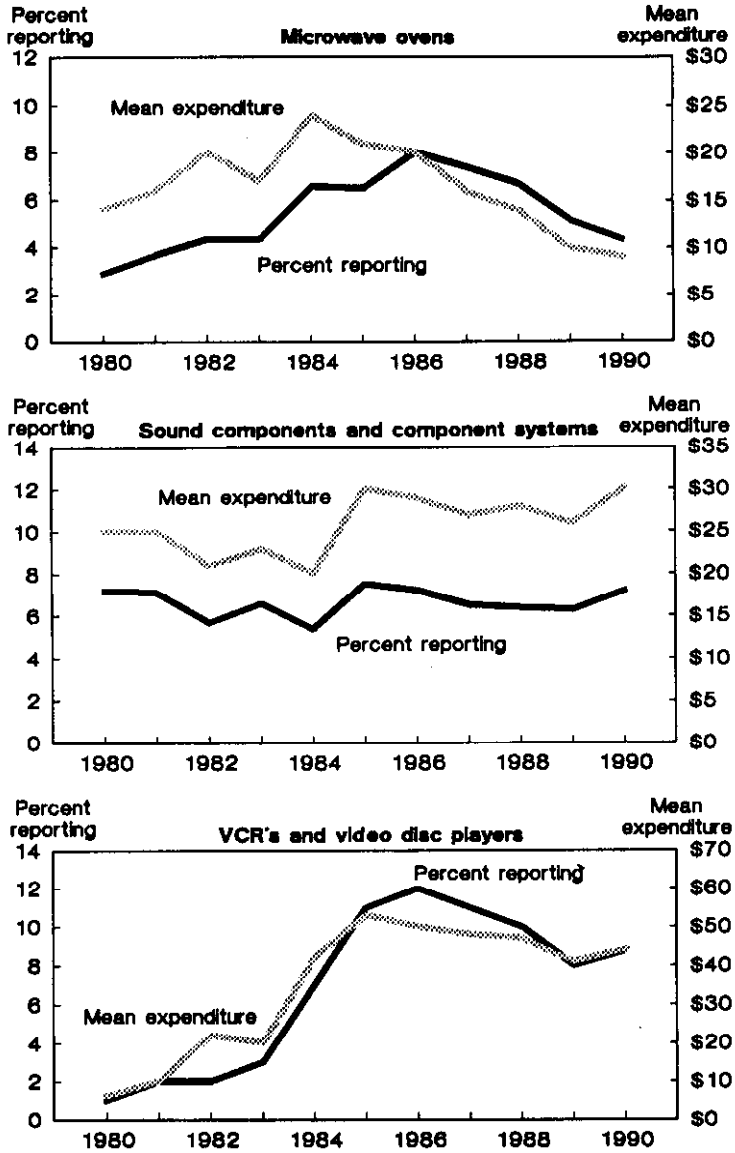
The average annual expenditure for videocassette recorders and video disc players peaked at $53 in 1985 for all consumer units. While the percent of households reporting expenditures for these items was higher in 1986 and 1987, the average annual expenditure declined from 1985 on, most likely as a result of an ongoing decline in prices. By 1990, both the average expenditure and the percent of consumer units reporting expenditures had declined.

The introduction of videocassette recorders and video games boosted sales of televisions in the 1980's. (See chart 2.) While prices of televisions, as measured by the Consumer Price Index, declined 29 percent from 1980 to 1990, the average expenditure on televisions rose 23 percent. The percent of households reporting expenditures on televisions was highest in 1986. New features, such as wireless remote control and new screen sizes and shapes, also helped increase sales of televisions.[11] In 1980, 10 percent of expenditures on televisions were for black-and-white models, compared with only 1 percent in 1990. Cable-compatible televisions are also popular now, a fact that should not be surprising, because more than 50 percent of all households with televisions are connected to a cable television system.

Data on expenditures for telephones and accessories, excluding telephone services, were first collected by the Consumer Expenditure Survey in 1982. In late 1982, Bell Systems offered customers the opportunity to purchase their telephones, rather than rent them.[12] The average annual expenditure for these commodities increased in 1983. The mean expenditure and percent of households reporting expenditures for telephones increased again in the late 1980's, as consumers replaced the units they had bought after the initial deregulation of the telephone industry.[13] New features and the need for telephones to be used with personal computers are other reasons for the rise in demand. Average annual expenditures and the percent of consumer units reporting expenditures for telephone-answering devices have also been increasing since data on these products were first collected in 1982.

When personal computers were first introduced to U.S. consumers in 1975, they were bought by households mostly for their game-playing and

Chart 1. Mean household expenditures on selected electronic equipment and percent of households reporting purchases, 1980–90



graphics capabilities. In 1986, manufacturers focused on the more mature computer market and introduced models for more practical applications. Today, consumers use their computers for recordkeeping, financial planning, and word processing. Now that many schools require computer classes for graduation, many parents are buying personal computers for their educational value.[14] Expenditures for computer hardware and software[15] are highest among husband-and-wife consumer units with the oldest child aged 6 to 17 years. Table 4 shows expenditures for computer hardware and software for 1990.

The Consumer Expenditure Survey first collected data on computers and computer hardware in 1982. From 1983 to 1985, average expenditures declined 29 percent, probably due to the waning interest in those personal computers sold

Table 3. **Average annual expenditures and percent of consumer units reporting expenditures for selected services, Consumer Expenditure Survey, Interview Survey, 1980–90**

Item	1980	1981[1]	1982[1]	1983[1]	1984	1985	1986	1987	1988	1989	1990
Rental of videocassettes, tapes, and discs:											
Expenditures	—	—	$0.2	$1	$3	$8	$12	$18	$23	$24	$25
Percent reporting	—	—	.1	.6	1.8	4.9	9.1	13.9	17.7	19.5	18.9
Community antenna and cable television:											
Expenditures	29	43	59	79	84	96	107	115	137	154	164
Percent reporting	19.2	24.7	29.6	35.8	34.6	38.3	41.7	43.4	47.4	51.0	51.0
Health maintenance plans:											
Expenditures	8	9	10	16	15	24	28	36	46	56	74
Percent reporting	2.1	2.5	2.4	3.3	2.9	4.2	4.8	5.9	6.8	7.5	8.1
Blue Cross/Blue Shield:											
Expenditures	84	85	93	99	118	109	101	102	121	138	147
Percent reporting	18.5	17.7	16.9	15.2	16.2	15.6	13.9	13.3	14.0	14.1	14.0
Other commercial health insurance plans:											
Expenditures	83	82	104	118	146	147	147	145	166	182	195
Percent reporting	20.7	20.5	20.0	20.9	22.3	22.4	22.2	22.7	21.9	21.8	21.6
Medicare:											
Expenditures	29	29	33	37	46	49	48	59	77	84	83
Percent reporting	18.9	18.2	18.2	19.3	19.6	19.8	19.9	20.7	19.7	18.9	18.7
Commercial medicare supplements and other health insurance:											
Expenditures	21	18	21	26	45	46	47	50	64	77	84
Percent reporting	7.1	6.5	6.8	7.3	8.8	9.1	9.4	9.4	10.7	12.2	12.3
Day care:											
Expenditures	30	41	38	49	55	65	71	81	87	111	106
Percent reporting	3.4	4.0	3.7	4.2	4.3	4.7	4.9	4.9	5.1	5.5	5.3
Babysitting:											
Expenditures	44	50	53	59	62	74	76	75	72	84	88
Percent reporting	6.8	7.3	7.4	6.8	7.3	7.6	6.8	6.4	5.9	6.3	6.5
Meals at restaurants, carryouts, and other establishments:											
Expenditures	503	577	595	654	642	712	687	727	742	791	757
Percent reporting	74.4	76.5	76.7	78.2	77.3	78.7	78.9	79.0	79.3	80.3	78.5
Housekeeping services:											
Expenditures	46	44	45	50	62	62	60	73	77	84	75
Percent reporting	5.1	5.3	5.2	5.6	6.2	6.4	6.1	6.8	6.4	6.7	6.6
Gardening and lawn care services											
Expenditures	24	31	34	39	38	43	40	47	50	58	64
Percent reporting	8.9	11.2	11.4	12.0	11.2	12.4	11.5	11.6	11.3	11.7	11.8

[1] Data for urban consumer units only. (Urban consumer units spend differently than rural consumer units; for further information, see John M. Rogers, "Expenditures of urban and rural consumers, 1972–73 to 1985," *Monthly Labor Review*, March 1988, pp. 41–45.)

NOTE: Dashes indicate data not collected.

Table 4. **Average annual expenditures for selected durable goods, by composition of consumer unit, Consumer Expenditure Survey, Interview Survey, 1990**

Consumer unit	Purchases of videocassette recorders	Videocassettes, tapes, and discs		Purchases of computer—	
		Purchases	Rentals	Hardware	Software
All consumer units	$44	$14	$25	$46	$8
Husband and wife only	41	13	16	46	7
Husband and wife with children	70	21	43	72	12
Oldest child under 6	93	20	43	63	7
Oldest child 6 to 17	72	21	45	83	17
Oldest child 18 or over	50	20	39	61	8
Single parent	17	8	23	17	2
Single person and other	27	10	15	33	6

primarily for their game-playing features. Since 1986, expenditures have increased steadily, while the percent of households reporting expenditures for personal computers has declined slightly.

Spending on services

U.S. consumers allocated an increasing share of their spending dollars to services in the 1980's, compared with 1972–73, the last Consumer Expenditure Survey prior to 1980.[16] Table 3 shows these increases, for selected services, continuing throughout the 1980's.

The increased availability of cable television gave consumers the opportunity to receive as many as 78 channels. The average expenditure for community antenna and cable television rose from 1980 to 1990, due to increases in both the price and the percent of consumer units reporting expenditures for the service. From 1984 to 1990, average annual expenditures grew 95 percent, while the Consumer Price Index for such services increased 52 percent. The percent of consumer units reporting expenditures for community antenna and cable television rose almost 16 percentage points from 1984 to 1990.

Health maintenance organizations are a growing segment of the health insurance industry. The percent of consumers reporting expenditures for health maintenance plans increased from 2 percent in 1980 to 8 percent in 1990. Over the same period, those reporting expenses for Blue Cross/Blue Shield dropped from more than 18 percent to 14 percent of all households. While the percent of consumer units reporting expenditures for commercial health insurance and medicare remained fairly stable, the percent reporting expenditures for commercial medicare supplements and other health insurance went from 7 percent in 1980 to 12 percent in 1990. Because of rising medical costs, employers are increasingly sharing the costs of employer-sponsored health insurance with their employees. At the same time, employees are turning to plans that use health maintenance organizations, which generally require few out-of-pocket expenses beyond premiums. Data from BLS Area Wage Surveys show that health maintenance organizations experienced rapid growth during the 1980's in the percent of participants enrolled. This growth is attributed to an increased desire on the part of employers, employees, and health care insurers to combat the rising costs of health care.[17]

The increased frequency of mothers working outside the home is quantified by data from the Current Population Survey which show that 58 percent of women with children under age 6 were in the labor force in 1990, compared with 42 percent in 1980. This increase has fueled a greater need for child care services, in the child's home or in a day care center. The percent of husband-and-wife families with oldest child under 6 years reporting day care expenses rose from 21 percent in 1980 to 33 percent in 1990. (See chart 3.) The average annual amount spent by this group rose from $185 to $796 over the same period. These values may seem low, not only because they are sample means and not means of just those households making the expenditure, but also because about a quarter of employed mothers with children under age 5 either care for their children themselves or rely on the children's fathers for primary child care.[18] In 1980, the average amount spent on day care by families with oldest child under 6 years was 71 percent of the average amount spent by such families on babysitting. (Generally, day care is child care in an institutional setting, whereas babysitting is care in someone's home.[19]) By 1990, the average amount spent on day care was 150 percent of the amount for babysitting. An increase in the number of day care centers during the 1980's has contributed to this change. In 1982, there were 19,522 child care centers in the United States; by 1987, there were 26,809.[20]

Also related to the increase in the number of women in the labor force is the percent of con-

Chart 2. **Mean household expenditures on televisions, percent of households reporting purchases, and the Consumer Price Index for televisions, 1980–90**

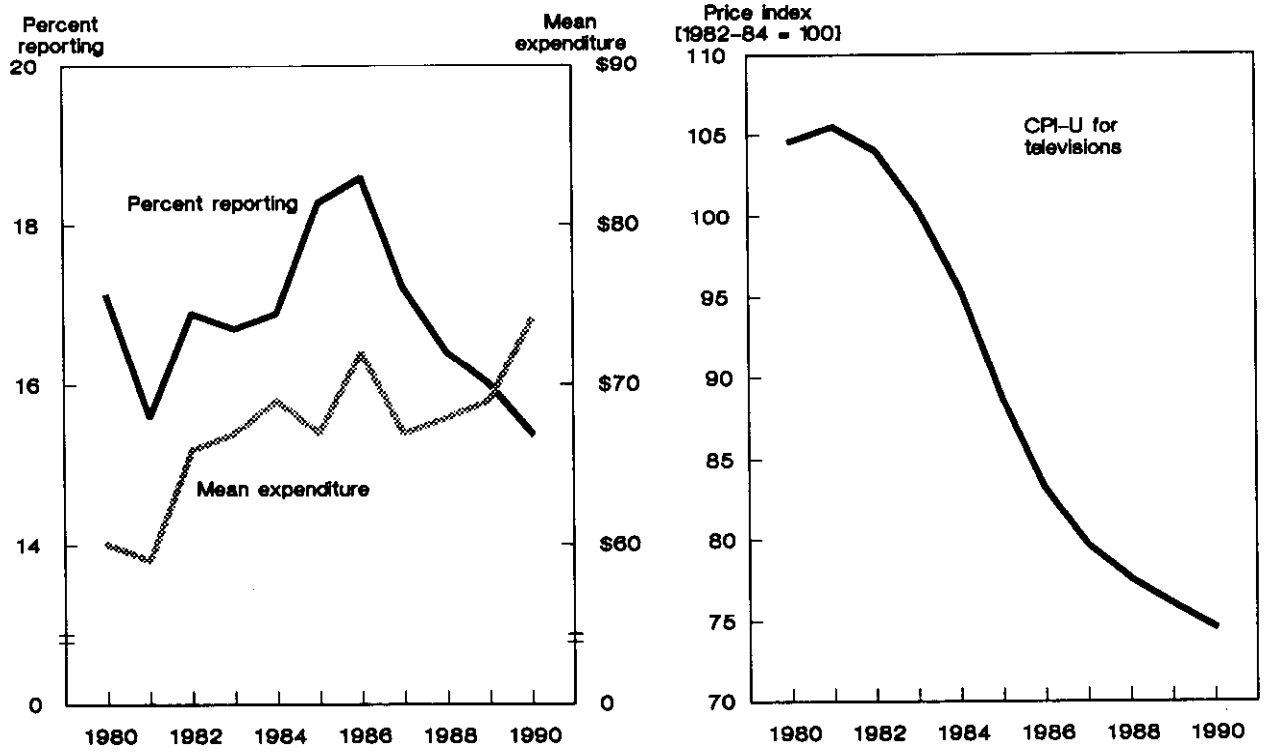
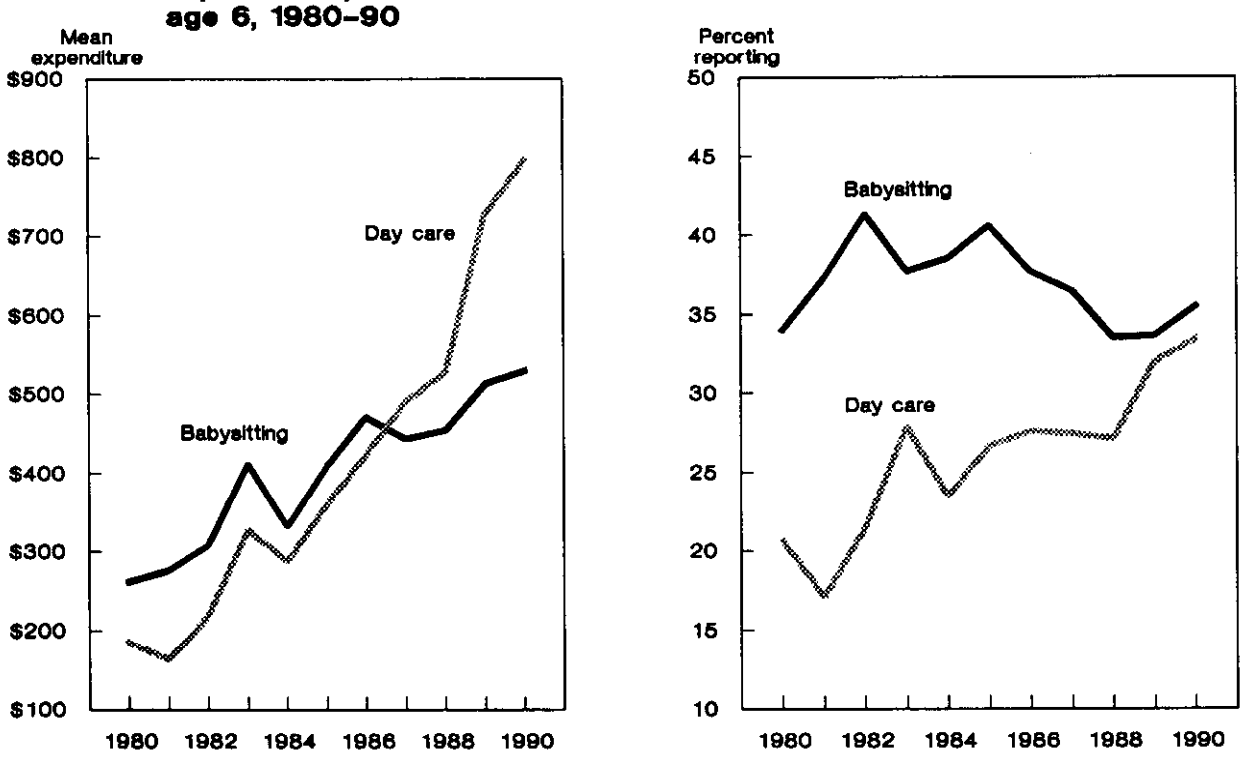


Chart 3. **Mean expenditures on day care and babysitting, and percent reporting expenditures, for husband-wife consumer units with oldest child under age 6, 1980–90**



sumer units reporting expenditures for meals at restaurants and for housekeeping services. The percent of households reporting expenditures for meals at restaurants increased from 74 percent in 1980 to 79 percent in 1990. As with child care centers, the number of eating places in the United States has risen, from 284,059 in 1982 to 332,611 in 1987.[21] Table 5 shows that, from 1980 to 1990, the percent of consumer units with oldest child under age 6 that reported expenses for meals at restaurants grew 6 percentage points.

The average expenditure and the percent of households reporting expenditures for housekeeping services[22] have increased for all types of families; the most dramatic rise was for husband-and-wife families with oldest child under age 6. (See table 5.) A 42-percent rise in prices of housekeeping services from 1980 to 1990 contributed to the increase in expenditures.

Average expenditures for gardening and lawn care services grew 166 percent from 1980 to 1990. Although prices, as measured by the Consumer Price Index, are not available prior to 1987, the increase in prices for gardening and other household services was 12 percent from 1987 to 1990, while expenditures for these services rose 36 percent. From 1980 to 1990, the percent of consumer units reporting expenditures for gardening and lawn care services increased from 9 percent to almost 12 percent.

Conclusions

The increase in women's labor force participation and the attainment by baby-boomers of their peak earning years clearly affected spending in the 1980's. Timesaving goods and services, such as telephone answering machines and eating meals away from home, were extremely popular, as were entertainment-related goods and services, such as videocassette recorders and cable television. Goods and services offering convenience will certainly continue to be popular, but what new commodities will consumers demand in the 1990's? What kinds of electrical and electronic products will the industry introduce to reproduce the response of consumers to the videocassette recorder? Will the interaction between computers on the one hand and televisions and telephones on the other be embraced by U.S. consumers?

Undoubtedly, consumer spending patterns will be affected by the expected changes in the age distribution of the population throughout the 1990's.[23] Projected increases in the population aged 75 and over will affect expenditures on health care, housing, and transportation. The older population allocates a larger share of its total expenditures to health care and a smaller share to transportation. People in this age group buy fewer cars, use them less, and have stocks of furniture and durables. The projected decline in the number of 25- to 29-year-olds will affect the demand for housing and the associated demand for durables, and the projected decline in the population under age 5 will affect child care expenditures. Population increases are expected in the group aged 35–54 years, which may offset the decline in the 25- to 29-year-old age group. How will spending by the baby-boomers change as they look to sending their children to college, planning their own retirement, and even caring for their parents?

Throughout the years, several changes have been made to the Interview Survey so that it could explicitly include goods and services that became popular in the 1980's, such as videocassette recorders and home computers. In 1991, additional information is being collected about home equity loans, a relatively new form of financing purchases. Other new products and

Table 5. **Average annual expenditures and percent of consumer units reporting expenditures for selected services, by composition of consumer unit, Consumer Expenditure Survey, Interview Survey, 1980 and 1990**

Consumer unit	Meals at restaurants				Housekeeping services			
	1980		1990		1980		1990	
	Mean	Percent reporting	Mean	Percent reporting	Mean	Percent reporting	Mean	Percent reporting
All consumer units	$503	74	$757	78	$46	5.1	$75	6.6
Husband and wife only	542	76	896	82	54	5.9	102	8.7
Husband and wife with children	547	80	894	84	42	4.9	101	7.6
Oldest child under 6	430	80	828	86	18	3.2	111	7.5
Oldest child 6 to 17	522	81	848	85	50	5.2	106	7.9
Oldest child 18 or over	672	80	1,026	82	47	5.5	84	7.0
Single parent	307	67	410	70	32	2.5	32	2.7
Single person and other	453	69	626	74	43	5.2	50	5.4

services may be added as they are disseminated throughout the buying population. The Bureau of Labor Statistics will continue to report on these new spending patterns of U.S. consumers. □

Footnotes

[1] James W. Hughes, "Understanding the Squeezed," *American Demographics*, July 1991, p. 44.

[2] William D. Passero, "Goods vs. Services: From the Perspective of Consumer Spending," *Proceedings of the 34th Annual Conference of the American Council on Consumer Interests* (Columbia, MO, American Council on Consumer Interests, 1988), pp. 45–51.

[3] A consumer unit is (1) a single person living alone or sharing a household with others, (2) members of a household related by blood, marriage, adoption, or some other legal arrangement, or (3) two or more persons living together who share responsibility for at least two out of three major types of expenses—food, housing, and other expenses. The terms *household* and *consumer* are used synonymously with *consumer unit* for convenience.

[4] The Consumer Expenditure Survey is described in detail in *BLS Handbook of Methods*, Bulletin 2285 (Bureau of Labor Statistics, 1988), ch. 18.

[5] Louis T. Wells, Jr., *The Product Life Cycle and International Trade* (Boston, Harvard University, 1972), pp. 8–10.

[6] Information from the Consumer Expenditure Survey on ownership of these items is not available prior to 1988.

[7] The data on expenditures for prepared foods are from the Diary Survey of the Consumer Expenditure Survey. Although prepared foods are not durable goods, it is appropriate to discuss them in this section because many are produced specifically for cooking in microwave ovens.

[8] Consumer Electronics Group, *Consumer Electronics Annual Review* (Washington, Electronic Industries Association, 1988), p. 31.

[9] See "The Start of a CD Backlash?" *Newsweek*, July 16, 1990, p. 46.

[10] Rentals of videocassette tapes and discs are a service, but expenditures for these items are discussed here, because they relate directly to videocassette recorders.

[11] Consumer Electronics Group, *Annual Review*, p. 20.

[12] "To Buy or Rent," *Time*, Nov. 22, 1982, pp. 88–89.

[13] Consumer Electronics Group, *Annual Review*, pp. 43–44.

[14] Consumer Electronics Group, *Annual Review*, pp. 40-41.

[15] Data on computer software were first made available for the year 1988.

[16] Passero, "Goods vs. Services," p. 45.

[17] Michael Bucci, "Health maintenance organizations: plan offerings and enrollments," *Monthly Labor Review*, April 1991, pp. 11–18.

[18] *Who's Minding the Kids? Child Care Arrangements: Winter 1984–85*, Current Population Reports, Series P–70, No. 9 (Bureau of the Census, 1987).

[19] Day care expenses include expenses for facilities that are used primarily to care for preschool children while their parents work, as well as expenses for nursery schools and preschools. Babysitting expenses include not only expenses for part-time babysitting during the evening and weekends, but also expenses for care during the day, either in the child's home or in the home of the babysitter.

[20] *Census of Service Industries, Geographic Area Series*, SC87–A–52 (Bureau of the Census, November 1989), p. 21.

[21] *Census of Retail Industries, Geographic Area Series*, RC87–A–52 (Bureau of the Census, August 1989), p. 16.

[22] Housekeeping services include cleaning, laundering, window washing, carpet cleaning, cooking, and other domestic duties.

[23] *Projections of the Number of Households and Families: 1986 to 2000*, Current Population Reports, Series P–25, No. 986 (Bureau of the Census, May 1986).