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CAPITAL SPENDING IN MAJOR METROPOLITAN AREAS OF THE FOURTH DISTRICT

The most recent semiannual survey of expected plant and equipment spending was conducted by the Federal Reserve Bank of Cleveland in the spring of 1971 among manufacturing and selected other business firms in the three largest metropolitan areas of the Fourth Federal Reserve District.¹ The results are generally in line with the findings of recent nationwide surveys, including the latest quarterly survey by the Commerce Department and the Securities and Exchange Commission (SEC). Manufacturing firms in the Cleveland, Cincinnati, and Pittsburgh metropolitan areas, like manufacturers in the entire country, expect to spend less for new capital equipment in 1971 than in 1970. In contrast, public utilities in the three areas, as in the nation, plan to exceed their actual 1970 outlays in 1971. The area survey also indicates that in 1972—a period not covered by the nationwide survey—manufacturing firms in the three areas plan to increase their capital outlays above the expected 1971 level, while public utilities expect a further increase in spending only in Cincinnati, and reductions in the other two areas.

¹The Pittsburgh area survey was conducted for the Federal Reserve Bank of Cleveland by the University of Pittsburgh.

IN THIS ISSUE

Capital Spending in Major
Metropolitan Areas
of the Fourth District . . 3

Consumer Income, Spending,
and Saving, 1960-1970 .10

ECONOMIC REVIEW

The latest Commerce-SEC survey showed lower expected spending for 1971 and lower actual spending in 1970 than the nation's manufacturing concerns had indicated at the time of the preceding quarterly survey. A similar downward revision by area manufacturing firms of both their actual capital outlays in 1970 and their spending plans for 1971 occurred in two of the three areas, as shown by a comparison of the results of the most recent survey with those of the preceding one.

CLEVELAND AREA

Manufacturing firms in the four-county Cleveland metropolitan area that participated in the most recent survey expect to spend 20 percent less for new plant and equipment in 1971 than they actually spent in 1970 (see Table I). In comparison, public utilities in the Cleveland area are planning a 21-percent increase in capital spending in 1971.

These findings of the latest survey represent a downward revision of manufacturers' earlier spending expectations for 1971 as reported in the survey conducted in the fall of 1970. At that time, only a 10-percent reduction from the 1970 level of spending had been predicted for 1971. More than one-half of the individual manufacturing firms participating in both surveys reported a smaller figure for 1971 in the latest survey. The actual spending for 1970 was also pared from estimates made in the previous survey; and more than one-half of the manufacturing concerns showed lower amounts of actual spending in 1970. Public utilities also spent less in 1970 than the returns of the fall 1970 survey had indicated—in their case, it meant a smaller increase over the preceding year than originally planned. They, however, did not trim spending plans for 1971 between the two

TABLE I

Capital Spending by Cleveland Area Firms (Spring 1971 Survey)

	Year-to-Year Percent Changes	
	1970 (actual) to 1971 (planned)	1971 (planned) to 1972 (planned)
MANUFACTURING	-20%	+18%
Durable goods*	-24	+22
Primary metals	-30	+61
Fabricated metals	-22	+27
Machinery	-29	-11
Electrical equipment	+41	- 2
Transportation equipment	-34	- 3
Nondurable goods*	+10	- 8
Food	+32	+30
Printing and publishing	-19	+27
Chemicals	+22	-35
Rubber and plastics	+31	+16
PUBLIC UTILITIES	+21	- 9
TOTAL	- 5%	+ 4%

* Includes industries not listed separately to avoid disclosure.

Source: Federal Reserve Bank of Cleveland

survey dates, reflecting the pressing need for expansion in the utilities industry.

The spending reductions planned for 1971 are concentrated in the durable goods section of the manufacturing industries. All but one of the major industries in that section indicate smaller outlays for 1971 than for 1970. The substantial rise in spending planned for 1971 in the electrical equipment industry actually reflects the plans of only one or two large establishments, while capital investments of the remaining firms in the industry are expected to fall short of the 1970 level. Producers of nondurable goods, in contrast, plan to raise their spending in 1971 10 percent above 1970, or 9 percentage points more than they had predicted in the fall of 1970.

TABLE II

Capital Spending by Cleveland Area Firms (Spring 1971 Survey)
Percent Distribution of Total Spending by Type*
(Between Structures and Equipment and Between Expansion and Modernization)

	Structures†			Expansion‡		
	1970	1971	1972	1970	1971	1972
MANUFACTURING	19%	19%	16%	56%	42%	39%
Durable goods §	17	16	15	56	39	39
Primary metals	12	11	14	67	51	65
Fabricated metals	25	2	39	52	9	9
Machinery	22	15	8	54	31	22
Electrical equipment	18	6	10	49	34	29
Transportation equipment	15	27	15	47	53	49
Nondurable goods §	29	31	19	55	48	39
Food	49	56	23	66	57	63
Printing and publishing	51	24	56	30	29	39
Chemicals	24	31	12	71	57	39
Rubber and plastics	3	16	4	44	26	18
PUBLIC UTILITIES	25	27	22	86	79	71
TOTAL	22%	23%	19%	65%	57%	53%

* Based only upon returns in which these breakdowns were supplied.

† Spending for equipment equals 100 percent less the percent shown for structures.

‡ Spending for modernization equals 100 percent less the percent shown for expansion.

§ Includes industries not listed separately to avoid disclosure.

Source: Federal Reserve Bank of Cleveland

For 1972, spending plans for the durable and the nondurable goods portions of the manufacturing sector will be reversed in comparison with plans for 1971. Producers of hard goods plan to spend 22 percent more in 1972 for new plant and equipment than in 1971, while producers of soft goods expect to reduce outlays by 8 percent (see Table I). The resulting 18-percent increase for the entire manufacturing sector will partially restore the level of spending by manufacturing firms in

the Cleveland area to 11 percent below the actual level of spending in 1970.

Although public utilities in the Cleveland area are planning to cut spending back by 9 percent in 1972, the level of spending would still be 10 percent above actual spending in 1970.

Only about \$1 of every \$5 of total capital investment by Cleveland manufacturing concerns is earmarked for construction in 1971; and only \$1 in every \$6, in 1972 (see Table II), as relatively few construction projects of any great size appear to be scheduled for 1971 or 1972. In line with this, the share of manufacturers' total spending designated for expansion of existing production facilities is somewhat smaller in 1971 than in previous years and is expected to diminish still further in 1972.

The continued nationwide downward trend in manufacturing capacity utilization rates is borne out by the response to the latest Fourth District survey. While the proportion of firms reporting insufficient capacity is approaching zero, "too much" capacity was reported by almost one-half of all manufacturing concerns replying to the question on capacity and by more than one-half of durable goods producers in the group.

Manufacturing concerns that supplied information on methods of financing their capital investments indicated they expect to finance more than 90 percent of their planned spending in 1971 and 1972 from internal sources of funds, as they did in 1970. More than four of every five firms responding to the question plan to rely solely on internal sources of funds in both 1971 and 1972, as in 1970.

CINCINNATI AREA

Manufacturing concerns in the seven-county Cincinnati metropolitan area that participated in

ECONOMIC REVIEW

TABLE III

**Capital Spending by Cincinnati Area Firms
(Spring 1971 Survey)**

Year-to-Year Percent Changes

	1970 (actual) to <u>1971 (planned)</u>	1971 (planned) to <u>1972 (planned)</u>
MANUFACTURING	- 1%	+23%
Durable goods*	+ 5	+13
Primary and fabricated metals†	+40	+14
Machinery	-44	+40
Electrical equipment	+59	+46
Transportation equipment	+19	+ 8
Nondurable goods*	- 6	+30
Food	+ 6	+37
Paper	-27	-10
Printing and publishing	-24	+28
Chemicals	- 8	+30
PUBLIC UTILITIES	+40	+14
TOTAL	+21%	+17%

* Includes industries not listed separately to avoid disclosure.

† Combined in order to preclude disclosure of individual establishment data.

Source: Federal Reserve Bank of Cleveland

the spring 1971 survey expect virtually no change in the level of spending for new plant and equipment in 1971, compared with their actual spending in 1970. Public utilities in the area, on the other hand, plan to spend 40 percent more in 1971 than in 1970 (see Table III).

As revealed by the most recent survey, Cincinnati manufacturers have lowered their sights since the date of the previous survey in the fall of 1970, when they expected to raise capital investments in 1971 7 percent above the 1970 level. In the interval between the two surveys, one-half of the manufacturing firms participating in both surveys revised their spending plans for 1971

downward,² while the other one-half made either upward revisions or no changes in their plans. In addition, spending plans for 1970 appear to have been cut back during the latter part of 1970. In the spring 1971 survey, over one-half of the participating manufacturing firms reported amounts actually spent in 1970 that were lower than their estimates in the fall survey.

Public utilities in the area also scaled down their 1970 capital outlays after the fall survey. But, unlike the manufacturing group, they sharply raised their spending plans for 1971 which, at the time of the fall 1970 survey, had provided for virtually no increase in spending above the 1970 level.

Within the manufacturing sector, spending plans for 1971 differ considerably between the hard goods and the soft goods industries. Most major industries in the hard goods group, except machinery, plan to spend more in 1971 than in 1970, while spending reductions predominate in the soft goods group.

For 1972, the outlook for increased investments appears favorable among both manufacturing and public utilities firms. Manufacturers as a group anticipate a 23-percent rise in capital spending, in which all major industries in both the durable and nondurable goods groups, with the exception of the paper industry, are expected to share. Public utilities also plan to invest a substantially greater amount in new plant and equipment in 1972 than in 1971.

The proportion of total spending by manufacturers that is earmarked for new structures is expected to remain the same in 1971 as in 1970,

²In particular, one project reported in the fall 1970 survey, involving several million dollars for expansion and modernization of a plant in the primary and fabricated metals group, apparently was cancelled or postponed.

TABLE IV

Capital Spending by Cincinnati Area Firms
(Spring 1971 Survey)
Percent Distribution of Total Spending by Type*
(Between Structures and Equipment and
Between Expansion and Modernization)

	Structures†			Expansion‡		
	1970	1971	1972	1970	1971	1972
MANUFACTURING	20%	21%	27%	60%	51%	60%
Durable goods§	24	24	8	34	27	23
Primary and fabricated metals#	11	4	2	17	3	3
Machinery	30	1	9	46	21	26
Electrical equipment	15	7	16	53	42	50
Transportation equipment	26	37	—0—	n.a.	n.a.	n.a.
Nondurable goods§	17	19	36	72	62	75
Food	21	16	23	46	32	56
Paper	26	10	10	15	40	32
Printing and publishing	16	26	6	52	27	37
Chemicals	16	20	42	82	73	83
PUBLIC UTILITIES	39	45	51	45	54	54
TOTAL	27%	31%	38%	54%	53%	57%

n.a. Not available.

* Based only upon returns in which these breakdowns were supplied.

† Spending for equipment equals 100 percent less the percent shown for structures.

‡ Spending for modernization equals 100 percent less the percent shown for expansion.

§ Includes industries not listed separately to avoid disclosure.

Combined in order to preclude disclosure of individual establishment data.

Source: Federal Reserve Bank of Cleveland

about \$1 out of every \$5 (see Table IV). That proportion should rise in 1972 to more than \$1 in every \$4, as several producers of nondurable goods, particularly in the chemical industry, have scheduled sizable construction projects. The pickup in new plant construction in 1972 will result in a reversal of the decline in the share of total outlays designated for expansion of manufac-

turing capacity and restore that share to its 1970 size of 60 percent.

The latest survey revealed no significant change in manufacturers' capacity utilization rates during the preceding six months. As was the case at the time of the previous survey, almost three out of every ten manufacturing firms that replied to the question of adequacy of present production facilities in the spring 1971 survey reported too much capacity, and about six out of every ten firms indicated adequate facilities.

Replies to the question on methods of financing capital spending from manufacturing firms—including few nationwide corporations—suggest improved prospects for internal financing of capital outlays in 1971 and 1972. Nine out of every ten responses indicate that respondents plan to use internal sources of funds exclusively, a larger proportion than in 1970. Correspondingly, the share of total spending to be financed from internally generated funds by responding manufacturers is expected to rise from about 85 percent in 1970 to 95 percent in 1971 and even higher in 1972.

PITTSBURGH AREA

The 1971 outlook for capital spending by business firms in the four-county Pittsburgh metropolitan area improved in the interval between the two surveys, from the fall of 1970 to the spring of 1971. Manufacturing firms participating in the fall survey expected to spend 13 percent less for new plant and equipment than in 1970, while public utilities and firms in selected other nonmanufacturing industries were planning to increase their capital investments by 16 percent over 1970. According to the most recent survey, Pittsburgh area manufacturing concerns now plan to reduce their spending in 1971 by only 7

ECONOMIC REVIEW

TABLE V

**Capital Spending by Pittsburgh Area Firms
(Spring 1971 Survey)**

Year-to-Year Percent Changes

	1970 (actual) to 1971 (planned)	1971 (planned) to 1972 (planned)
MANUFACTURING	- 7%	+ 8%
Durable goods*	- 5	+ 18
Stone, clay, and glass	-51	+ 36
Primary metals	+ 7	+ 43
Fabricated metals	-13	- 40
Machinery	+23	- 16
Electrical equipment	-26	+ 18
Nondurable goods*	-20	- 45
Food	+60	- 1
NONMANUFAC- TURING	+19	- 1
Transportation	+61	+128
Public utilities	+ 6	- 20
Retail trade	-61	- 55
TOTAL	+11%	+ 2%

* Includes industries not listed separately to avoid disclosure.

Sources: University of Pittsburgh and Federal Reserve Bank of Cleveland

percent, while nonmanufacturing firms expect a 19-percent increase in their capital outlays for 1971 (see Table V).

Some individual firms among the participants of both surveys curtailed their spending plans for 1971 between the two survey dates, but a slightly larger number of firms made upward revisions in their 1971 plans. At the same time, however, 1970 outlays were kept below the level planned in the fall of 1970 by a predominant number of respondents.

The expected reduction in spending in 1971 is greater among producers of soft goods (20 percent) than of hard goods (5 percent), while the expected rise in spending by nonmanufacturing firms reflects especially large increases in outlays

in the transportation industry, as the previous survey had already indicated.

For 1972, an 8-percent rise over the 1971 level of spending is expected by Pittsburgh area manufacturing firms as a group. The improvement will be due solely to expected higher spending by producers of hard goods (notably primary metals), while producers of soft goods as a group expect a reduction in spending for the second consecutive year.

Within the nonmanufacturing group, capital investment in 1972 will rise at a high rate in the transportation industry, but is expected to drop back in public utilities and trade. This will leave total outlays by the group in 1972 virtually at the 1971 level.

Spending for new structures in 1971 will continue to account for almost 30 percent of total capital spending by participating Pittsburgh area manufacturing firms. The proportion is expected to drop to about 20 percent in 1972, as only a few large new construction projects appear to be scheduled for 1972, except in the fabricated metals industry (see Table VI). Among nonmanufacturing firms, the proportion of total spending designated for new structures is expected to rise in both 1971 and 1972.

The share of total outlays used by manufacturing concerns to expand productive capacity is expected to increase from about one-third in 1970 to almost one-half in 1972. The primary and fabricated metal industries in particular are sustaining the high proportion of spending for expansion. Public utilities will also continue to use a large share of total spending to expand their services.

Less than two out of every three firms responding to the question concerning adequacy of manufacturing facilities considered their present

TABLE VI

Capital Spending by Pittsburgh Area Firms
(Spring 1971 Survey)
Percent Distribution of Total Spending by Type*
(Between Structures and Equipment and
Between Expansion and Modernization)

	Structures†			Expansion‡		
	1970	1971	1972	1970	1971	1972
MANUFACTURING	28%	29%	21%	32%	38%	48%
Durable goods §	28	30	22	31	37	50
Stone, clay, and glass	31	10	9	26	45	42
Primary metals	17	19	22	17	22	54
Fabricated metals	61	70	57	73	71	56
Machinery	25	39	7	32	62	48
Electrical equipment	12	10	6	13	18	16
Nondurable goods §	28	22	2	42	45	29
Food	5	4	5	22	25	23
NONMANUFACTURING	20	22	41	39	63	63
Transportation	19	32	69	21	63	57
Public utilities	21	17	30	69	63	73
Retail trade	#	#	#	#	1	1
TOTAL	23%	24%	35%	36%	52%	56%

* Based only upon returns in which these breakdowns were supplied.

† Spending for equipment equals 100 percent less the percent shown for structures.

‡ Spending for modernization equals 100 percent less the percent shown for expansion.

§ Includes industries not listed separately to avoid disclosure.

Less than 1%.

Sources: University of Pittsburgh and Federal Reserve Bank of Cleveland

capacity about adequate, while nearly one in every three firms reported "more than needed" capacity. These proportions suggest some deterioration of utilization rates since the fall of 1970 when only one-fifth of the responding firms reported too

much capacity and two-thirds considered their capacity adequate.

Four out of every five manufacturing firms answering the question on methods of financing expect to finance their capital investments entirely from internal sources of funds in 1971 and in 1972, the same proportion as in 1970. In absolute dollar totals, however, the rise in the proportion of internally-financed capital investments, from below 70 percent in 1970 to an expected 90 percent in 1972, indicates expectations of renewed growth of internal funds in 1971 and 1972.

CONCLUDING COMMENTS

Capital spending in the nation, as indicated by the most recent quarterly surveys, is not expected to resume a vigorous pace in 1971. While in some parts of the economy—public utilities, for example—spending will increase significantly, overall spending is only expected to keep pace with prices; and spending in the manufacturing sector is not expected to come up to the level of 1970.

Aside from differences in the relative size of changes in spending, capital outlays in the three areas of the Fourth District are in line with the national pattern. Manufacturing firms in the three areas not only reduced their actual 1970 outlays, but also their previous spending plans for 1971, which are now below the 1970 spending levels. Public utilities in the three areas expect a continued rise in capital investments this year, as they do nationwide.



CONSUMER INCOME, SPENDING, AND SAVING, 1960–1970

During the 1960-1970 period, consumer income, spending, and saving approximately doubled in current dollar terms and continued to display their generally stable long-term interrelationships. Consumer spending accounted for about 62 to 64 percent of total spending in the economy and for approximately 90 to 93 percent of consumer after-tax income. Despite this apparent stability in the relationships between income, spending, and saving, changes have occurred in recent years in the sources of consumer income and the nature of consumer purchases. This article reviews recent trends in consumer income, spending, and saving and discusses the most significant changes that occurred during 1960-1970. These changes include: (1) an almost continuous decline in the share of total personal income derived from proprietors' income and an appreciable increase in the proportion of income resulting from transfer payments; (2) a marked slowing in recent years in the rates of growth of both real disposable personal income and real aggregate consumer purchasing power; (3) a continuation of the postwar decline in the ratio of total consumer spending to disposable personal income reflecting reduced spending on nondurable goods that more than offsets increased spending on durable goods; and (4) a concomitant rise in the rate of personal saving.

PERSONAL INCOME AND CONSUMER PURCHASING POWER

Personal income may be broadly defined as current income from all sources received by persons. It is measured on a before-tax basis as the sum of wages, salaries and other labor income, proprietors' income, rental income, dividends and interest, and transfer payments, minus personal contributions for social insurance (see Table I).¹

During the 1960-1970 period, personal income increased nearly twofold, or at an average annual rate of 7.2 percent. On a year-to-year basis, the

¹For purposes of national income accounting, private trust funds and private health and welfare funds are classified as "persons." "Other labor income" includes compensation for injuries, employer contributions under private pension and related programs, and other items such as pay of military reservists and directors' fees. "Proprietors income" is the income of unincorporated enterprises. "Transfer payments" include benefit payments made under government social security, unemployment and veterans programs, and miscellaneous payments by business, including consumer bad debts. It should also be noted that personal income includes certain nonmonetary items such as imputed rent, interest, food, and fuel. For more complete definitions of terms and a discussion of the techniques of measurement, see *Supplement to Economic Indicators*, prepared for the Subcommittee on Economic Statistics of the Joint Economic Committee by the Committee Staff and Office of Statistical Standards, Bureau of the Budget, (Washington, D. C.: U. S. Government Printing Office, 1967).

growth of personal income generally reflected the pace of overall economic activity. For 1960 and 1961, the rate of growth in personal income averaged only 4.3 percent. In 1967 and 1970, the growth rates slowed from approximately 9 percent to about 7 percent. In 1970, however, the slowing in the rate of growth of personal income was cushioned by increases in social security benefits and Federal employees' pay. Combined, these increases boosted personal income by nearly \$7 billion. Other factors that helped to offset weaknesses in the growth of personal income in the private sector during 1970 included a supplemental pay increase for postal workers and increases in benefits for retired Federal workers and railroad retirement system pensioners.

Despite the slowing of the personal income growth rates in 1967 and 1970 and the sharp rise in personal contributions for social insurance since 1966, there has been a significant increase in the overall rate of growth of personal income in recent years. During 1965-1970, personal income grew at an average annual rate of 8.2 percent, compared with 6.1 percent during 1960-1965. The rather sizable gain in recent years was due primarily to increases in the components of wages, salaries and other labor income and the income from transfer payments. During 1965-1970, wages, salaries and other labor income increased at an average rate of 8.6 percent, compared with 6.0 percent during 1960-1965, while the average rate of growth of income from transfer payments more than doubled during the most recent period.

As a *share* of total personal income, however, the category of wages, salaries and other labor income has increased only moderately in recent years (see Table II). Despite the rapid advance of hourly earnings in 1970, wages, salaries and other labor income remained relatively stable as a

percent of total personal income. This continued stability was partially due to the fact that the rapid increase of earnings in 1970 was largely offset by reductions in the length of the average workweek and slower or reduced rates of employment—particularly in the manufacturing and construction industries. Income from transfer payments, however, has increased as a share of total personal income in recent years, particularly in 1967 and 1970. These increases reflected both the automatic stabilizing effects of unemployment compensation, which tend to increase as economic activity declines, as well as enlarged average social security benefits. The category of rental income, dividends, and interest income also increased on balance during 1960-1970, although since 1965, this category has shown little change in its relative importance as a source of income. The largest relative change among the sources of personal income occurred in proprietors' income. Since 1961, proprietors' income has shown an almost continuous decline as a percent of total personal income.

Although the effects of these changes in the sources of income are not certain, they have probably contributed to some extent to changes in the behavior and nature of consumer expenditures. For purposes of evaluating trends in consumer spending, however, disposable personal income is usually considered to be a more directly related concept than personal income.

Disposable personal income may be briefly defined as personal income minus personal tax and nontax payments.² Thus, the growth pattern of

²"Personal tax and nontax payments" include income taxes and other taxes not deductible as business expense, and other general government revenues received from individuals. *Ibid.*, p. 14.

ECONOMIC REVIEW

disposable personal income reflects changes in the tax laws as well as changes in the sources of personal income and the pace of overall economic activity. For example, the Revenue Act of 1964 reduced personal tax liabilities by more than \$6 billion in that year, thereby bolstering disposable personal income. The rate of growth of disposable personal income in current dollars jumped from 5 percent in 1963 to a rate of more than 8 percent in 1964 (see Table III). Conversely, the Revenue and Expenditure Act of 1968 increased tax liabilities and held down the gains in disposable personal income by varying amounts in 1968 and 1969. Nevertheless, the average annual growth rate of disposable personal income during the 1965-1970 period (7.7%) was considerably higher than during the 1960-1965 period (6.2%).

In real terms (1958 dollars), however, the average annual rate of growth of disposable personal income was significantly slower during the 1965-1970 period (4.0%) than during the 1960-1965 period (5.0%). The slowing in the rate of growth of real disposable personal income coincided with the most recent period of inflation. From a peak of 7.0 percent in 1964, the growth rate of real disposable personal income substantially declined to a rate of 2.5 percent in 1969. In 1970, the growth rate edged back up to 3.6 percent, reflecting primarily the reduction and expiration of the surtax. The record \$53.2 billion increase in current dollar disposable personal income in 1970 more than offset the continued strong advance of prices. Despite this slight rebound in the rate of growth of real disposable personal income in 1970, the rate of growth of consumers' real purchasing power as measured by real disposable personal income has been generally declining in recent years.

Since disposable personal income is not an all

inclusive measure of the amount of funds available for consumption, attempts have been made to devise alternative measures of consumer purchasing power. One such measure developed by The Conference Board estimates aggregate consumer purchasing power as the sum of disposable personal income, net household credit, and credits from government insurance and other adjustments (see Table IV).³ Net household credit is defined as net changes in outstanding consumer debt—that is, the difference between extensions and repayments of consumer instalment credit, consumer non-instalment credit, household mortgage credit, and other household credit. The category of credits from government insurance and other adjustments includes government life insurance and retirement fund transactions with households and capital gains dividends paid by investment funds to households. Viewed in this manner, the growth of consumer purchasing power during 1960-1970 followed the same general pattern as the growth in disposable personal income. During 1965-1970, the average annual rate of growth of aggregate consumer purchasing power in terms of current dollars was 7.0 percent, compared with 6.5 percent for the 1960-1965 period. In real terms, however, the average annual rate of growth in aggregate consumer purchasing power was only 3.4 percent during 1965-1970, compared with 5.4 percent for the 1960-1965 period. In 1969 and

³For a more complete discussion of "Aggregate Consumer Purchasing Power," see *Discretionary Spending*, Technical Paper Number 17, a research report of The Conference Board, 1966, pp. 6-10. It should be noted that there are conceptual differences among the component categories of "aggregate consumer purchasing power." For example, disposable personal income represents funds available for spending, while "net household credit" represents actual spending.

1970, the particularly slow growth of aggregate real consumer purchasing power primarily reflected sharp declines in net household credit and an acceleration in consumer prices. The sluggish growth of consumer loan extensions and a continued high rate of loan repayments throughout 1970, however, suggest that the sharp decline in net household credit in 1970 may have been due more to depressed consumer sentiment and a lack of demand for consumer type credit than to limitations on the amount of potential purchasing power available from that source.

On a per capita basis, disposable personal income and aggregate consumer purchasing power in current dollar terms increased \$1,400 or approximately 70 percent during 1960-1970 (see Table V). In real terms, however, the increases were only about half as large. Perhaps of greater significance for purposes of evaluating consumer spending is the fact that aggregate consumer purchasing power in real terms and on a per capita basis has shown virtually no increase during the past two years.

CONSUMER SPENDING

The growth in consumer spending during 1960-1970 generally followed the growth of disposable personal income (see Table VI). During 1965-1970, total personal consumption expenditures increased at an average annual rate of 7.3 percent, compared with a rate of 5.9 percent during 1960-1965. The more rapid rate of growth in spending during the most recent period apparently reflected the surge in disposable personal income that resulted from the tax cut in 1964 and the acceleration in economic activity. The imposition of the surtax in 1968, however, does not appear to have had an appreciable, or at least not an immediate, effect upon spending.

Instead, consumers reduced their rate of personal saving in late 1968 and offset the effect of the higher tax payments by further reducing their saving rate in 1969. This adjustment in personal saving enabled consumers to continue to increase their spending at very high rates in 1968 and 1969. In 1970, the rate of growth in consumer spending slowed appreciably, despite the large increase in current dollar disposable income. This sluggishness in consumer spending in 1970 was probably due, in part, to the nature of the increases in personal income and disposable income. Sudden increases in income—such as those that occurred in 1970 as the result of the lump sum payments of retroactive social security and Federal Government pay raises—frequently result in a temporary surge in saving and a more gradual rise in spending. Other factors such as employment prospects can also delay or reduce the spending response.

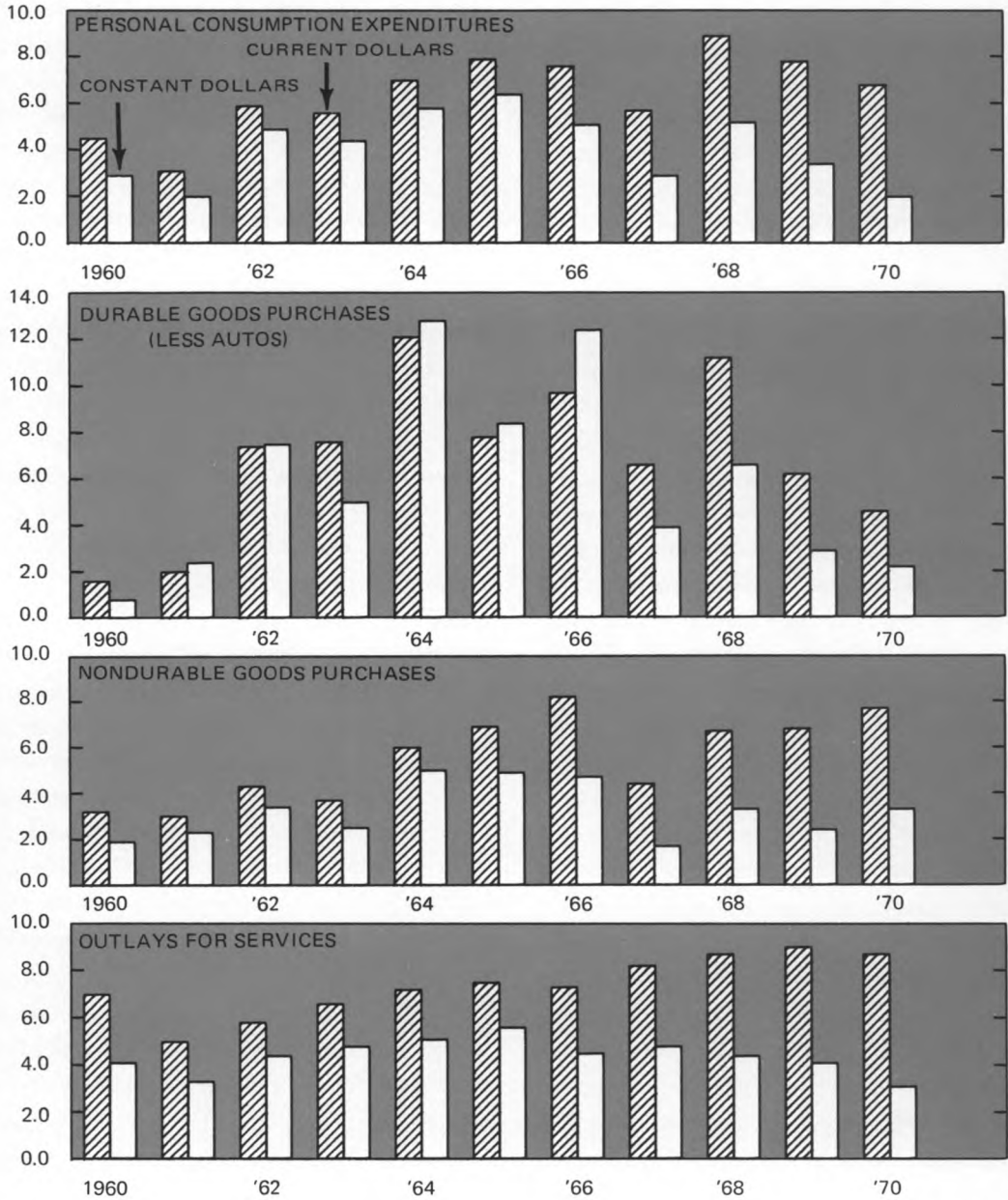
Much of the current dollar increase in consumer spending during recent years reflects strong gains in purchases of nondurable goods and services (see Chart 1). During 1965-1970, the average growth rates of current dollar outlays for nondurable goods and services increased approximately two percentage points. In real terms, however, the average annual growth rates of spending for nondurable goods and services remained essentially unchanged between the two periods 1960-1965 and 1965-1970.

The rate of growth of expenditures for durable goods was very volatile during the entire 1960-1970 period. This overall volatility and the recent slowing in such outlays was due largely to fluctuations in automobile purchases. The growth of durable good purchases *excluding automobiles* was considerably more stable than the growth of total durable goods expenditures. Excluding autos, durable goods purchases in current dollars grew

Chart 1.

CHANGES IN PERSONAL CONSUMPTION EXPENDITURES AND COMPONENTS

PERCENT



LAST ENTRY: 1970

ANNUAL

SOURCE: U. S. DEPARTMENT OF COMMERCE

slightly more rapidly during 1965-1970 than during 1960-1965. In real dollars, however, there was a marked decline during the most recent period, particularly in 1967, 1969, and 1970.

Although spending on nondurable goods in current dollars grew rapidly during recent years, it actually declined, in terms of both current and constant dollars, relative to total personal consumption expenditures (see Chart 2). That is, less of the total consumer dollar was spent for nondurable goods. During 1960-1965, nondurable goods purchases accounted for an average of 45.4 percent of total purchases in terms of current dollars and 46.3 percent in terms of constant dollars. These percentages declined, however, to 43.5 percent and 44.0 percent in current and constant dollars, respectively, during 1965-1970. These declines in nondurable goods purchases reflected a marked slowing in the rate of growth of spending for food and beverages relative to the growth of total personal consumption expenditures.

In terms of current dollars, the decline in the relative size of nondurable goods purchases during 1965-1970 was offset by some increase in durable goods purchases and a larger increase in outlays for services. Between 1960 and 1970, the share of total consumer purchases attributable to services rose from less than 40 percent to more than 42 percent. In real terms, however, the decline in the relative size of outlays for nondurable goods during 1965-1970 was offset entirely by an increase in durable goods purchases.

Total personal consumption expenditures as a percent of both disposable personal income and aggregate consumer purchasing power have been declining slightly in recent years (see Table VII). During 1965-1970, consumers spent an average of 90.8 percent of disposable personal income, com-

pared with 92.2 percent during 1960-1965.⁴ As a percent of aggregate purchasing power, the decline was from averages of 86.2 percent during 1960-1965 to 85.5 percent during 1965-1970.

The decline in the ratio of personal consumption expenditures to disposable personal income (in constant dollars) was due primarily to an almost continuous decline in nondurable goods as a percent of disposable personal income (see Chart 3). From a high of 44 percent in 1960, nondurable goods purchases declined as a percent of disposable income to a low of only about 39 percent in 1970. Outlays for services, on the other hand, generally increased as a percent of disposable income, particularly during 1967-1970. Durable goods purchases generally fluctuated on an upward trend within a range of 12 to 16 percent of disposable personal income during 1960-1970.

SAVING

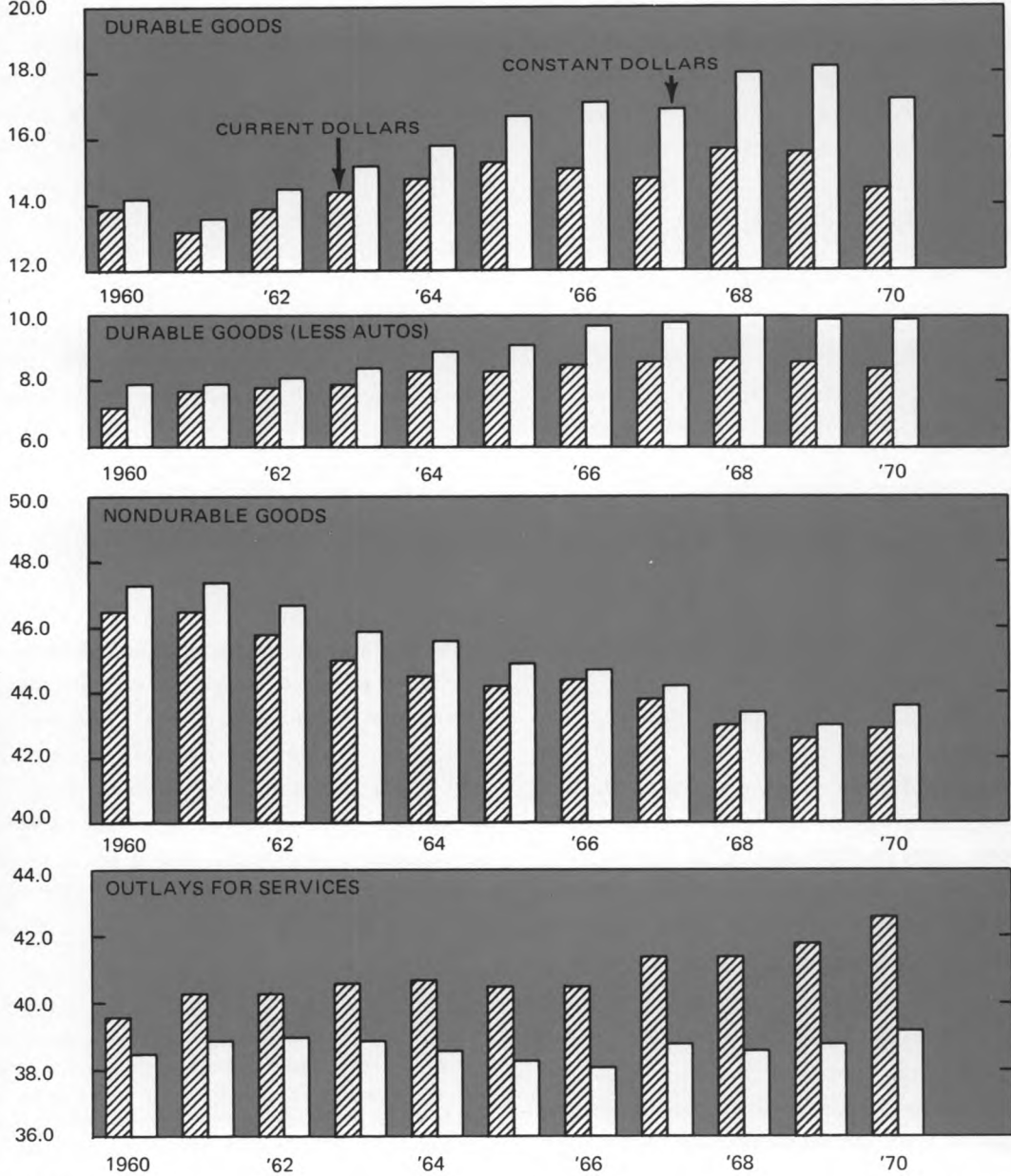
Personal saving is equal to disposable personal income less personal outlays—the sum of personal consumption expenditures, interest paid by consumers, and transfer payments to foreigners. As such, it is a residual that represents the change in net worth of persons. It may further be viewed as the acquisition of financial claims (such as cash and deposits, securities, and reserves of life insurance companies and noninsured pension funds)

⁴The relationships between total personal consumption expenditures and disposable personal income (in 1958 dollars) were estimated by least-squares regression for the periods 1950-1960 and 1960-1970 to determine if there had been any noticeable change in the relationships between the two periods. The results suggest a possible downward shift of the entire consumption function. The estimates for the 1950-1960 period, were $PCE = .9169DPI + .0020$; and, for the period 1960-1970, $PCE = .9134DPI - .0049$.

Chart 2.

COMPONENTS OF PERSONAL CONSUMPTION EXPENDITURES AS A PERCENT OF TOTAL

PERCENT
20.0



LAST ENTRY : 1970

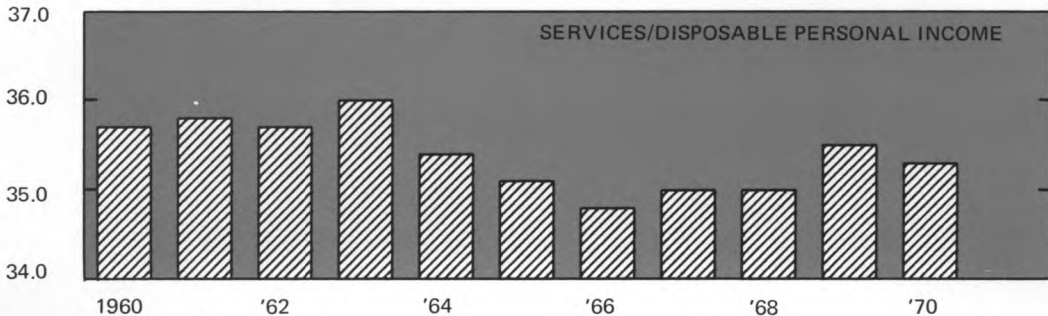
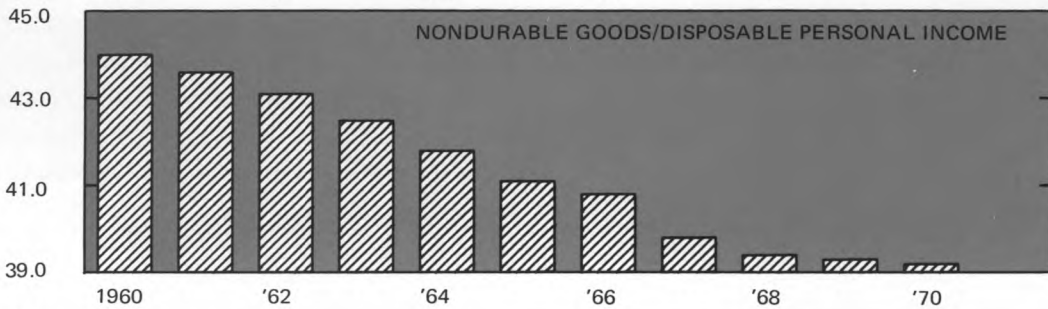
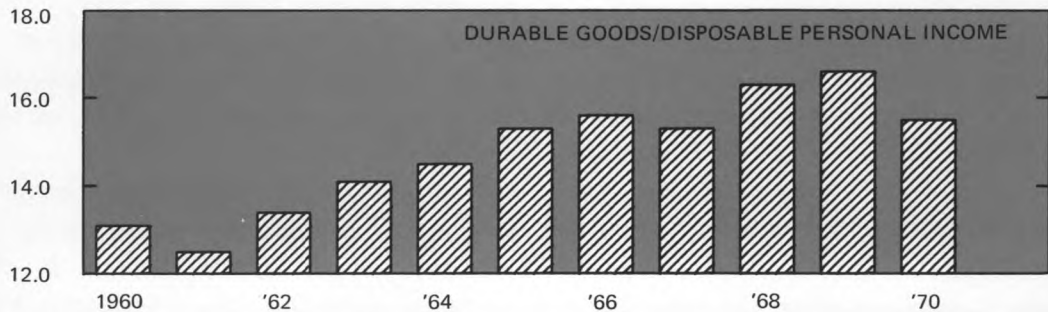
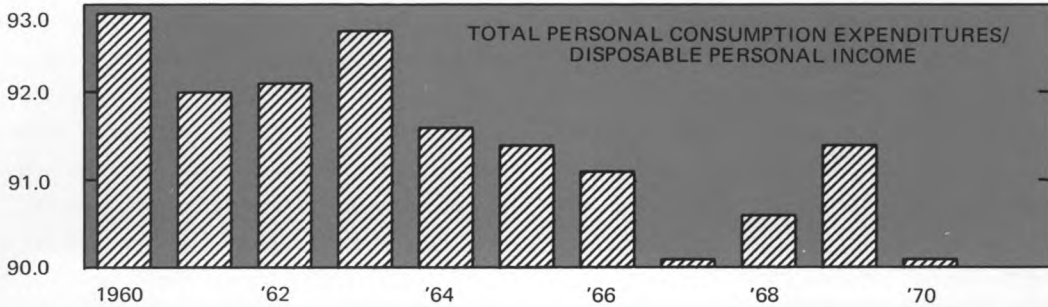
ANNUAL

SOURCE : U. S. DEPARTMENT OF COMMERCE

Chart 3.

THE RELATIONSHIP BETWEEN PERSONAL CONSUMPTION EXPENDITURES
AND DISPOSABLE PERSONAL INCOME 1960-1970 (1958 DOLLARS)

PERCENT



LAST ENTRY: 1970

ANNUAL

SOURCES: U. S. DEPARTMENT OF COMMERCE AND FEDERAL RESERVE BANK OF CLEVELAND

ECONOMIC REVIEW

less the net increase in indebtedness, plus the acquisition of physical assets net of capital consumption allowances.⁵

During 1960-1970, the current dollar value of personal saving increased nearly threefold (see Table VIII). When measured as average annual rates of growth, however, personal saving increased slightly from 10.8 percent during 1960-1965 to 12.1 percent during 1965-1970. In real terms the average rate of growth in personal saving *declined* from 9.7 percent during 1960-1965 to 8.3 percent during 1965-1970.

The fact that in recent years personal saving has risen faster than disposable personal income has resulted in an appreciable increase in the saving rate. Personal saving as a percent of disposable personal income rose from an average of 5.5 percent during 1960-1965 to 6.6 percent in the 1965-1970 period. In 1970, the relatively large increase in disposable personal income, accompanied by only moderate growth in consumer purchases, pushed personal saving close to a 20-year record rate.

⁵Supplement to *Economic Indicators*, 1967, *op. cit.*

SUMMARY

The growth of personal income during the period 1960-1970 was characterized by rapid advances in wages, salaries and other labor income and a sharp acceleration in transfer payments. In terms of the composition of the growth of personal income, however, the most apparent changes were a decline in proprietors' income and a sharp rise in income from transfer payments.

Despite the rapid growth in both pre-tax and after-tax consumer income, the growth of real disposable personal income and aggregate consumer purchasing power has slowed markedly in recent years. On a per capita basis, the slowing in the rate of growth of purchasing power has been even more pronounced.

During the 1960-1970 period, consumer spending did not keep pace with the growth of consumer income. Consequently, the personal saving rate has trended upward. The decline in the ratio between spending and income reflected an almost continuous decline throughout the period in nondurable goods purchases, relative to disposable personal income, that more than offset increases in the ratio of spending for durable goods and services.

TABLE I

Sources of Personal Income

1960-1970

(Billions of Dollars and

Percent Change from Previous Year)

Year	Personal Income	=	Wages, Salaries, and Other Labor Income	+	Proprietors' Income	+	Rental Income, Dividends, and Personal Interest Income	+	Income From Transfer Payments	-	Personal Contributions for Social Insurance	
	(Bil. of \$) (% Change)		(Bil. of \$) (% Change)		(Bil. of \$) (% Change)		(Bil. of \$) (% Change)		(Bil. of \$) (% Change)		(Bil. of \$) (% Change)	
1960	\$401.0	4.6%	\$282.8	4.9%	\$46.2	-0.9%	\$ 52.7	7.8%	\$28.5	7.1%	\$ 9.3	17.7%
1961	416.8	3.9	290.8	2.8	48.4	4.8	54.8	4.0	32.4	13.7	9.6	3.2
1962	442.6	6.2	310.0	6.6	50.1	3.5	59.6	8.8	33.3	2.8	10.3	7.3
1963	465.5	5.2	326.0	5.2	51.0	1.8	65.0	9.1	35.3	6.0	11.8	14.6
1964	497.5	6.9	350.3	7.5	52.3	2.5	70.6	8.6	36.7	4.0	12.5	5.9
1965	538.9	8.3	377.6	7.8	57.3	9.6	77.5	9.8	39.9	8.7	13.4	7.2
1966	587.2	9.0	415.2	10.0	61.3	7.0	84.4	8.9	44.1	10.5	17.7	32.1
1967	629.3	7.2	445.4	7.3	62.1	1.3	90.5	7.2	51.8	17.5	20.5	15.8
1968	688.7	9.4	489.7	9.9	64.1	3.2	98.6	9.0	59.0	13.9	22.8	11.2
1969	748.9	8.7	536.6	9.6	66.9	4.4	106.3	7.8	65.1	10.3	26.0	14.0
1970	801.0	7.0	570.5	6.3	67.6	1.0	113.1	6.4	77.6	19.2	27.8	6.9

Average Annual Rates of Change During Period:

1960-1970	7.2%	7.3%	3.9%	7.9%	10.5%	11.6%
1960-1965	6.1	6.0	4.4	8.0	7.0	7.6
1965-1970	8.2	8.6	3.4	7.9	14.2	15.7

NOTE: Components may not add to totals because of rounding.

Source: U. S. Department of Commerce

TABLE II

Sources of Personal Income

1960-1970

(Percent of Total)

Year	Personal Income	=	Wages, Salaries, and Other Labor Income	+	Proprietors' Income	+	Rental Income, Dividends, and Personal Interest Income	+	Income From Transfer Payments
1960	100.0%		70.5%		11.5%		13.1%		7.1%
1961	100.0		69.8		11.6		13.1		7.8
1962	100.0		70.0		11.3		13.5		7.5
1963	100.0		70.0		11.0		14.0		7.6
1964	100.0		70.4		10.5		14.2		7.4
1965	100.0		70.1		10.6		14.4		7.4
1966	100.0		70.7		10.4		14.4		7.5
1967	100.0		70.8		9.9		14.4		8.2
1968	100.0		71.1		9.3		14.3		8.6
1969	100.0		71.7		8.9		14.2		8.7
1970	100.0		71.2		8.4		14.1		9.7

Average During Period:

1960-1970	70.6%	10.3%	14.0%	8.0%
1960-1965	70.1	11.1	13.7	7.5
1965-1970	70.9	9.6	14.3	8.4

NOTE: Personal contributions for social insurance have not been deducted from the component sources of personal income; therefore, the sums of the components of personal income are greater than the total.

Source: U. S. Department of Commerce

TABLE III

Disposable Personal Income

1960-1970

(Billions of Dollars and

Percent Change from Previous Year)

Year	Personal Income		Personal Tax and Nontax Payments		Disposable Personal Income (Current \$)		Disposable Personal Income (1958 \$)	
	(Bil. of \$)	(% Change)	(Bil. of \$)	(% Change)	(Bil. of \$)	(% Change)	(Bil. of \$)	(% Change)
1960	\$401.0	4.6%	\$ 50.9	10.2%	\$350.0	3.8%	\$340.2	2.2%
1961	416.8	3.9	52.4	2.9	364.4	4.1	350.7	3.1
1962	442.6	6.2	57.4	9.5	385.3	5.7	367.3	4.7
1963	465.5	5.2	60.9	6.1	404.6	5.0	381.3	3.8
1964	497.5	6.9	59.4	- 2.5	438.1	8.3	407.9	7.0
1965	538.9	8.3	65.7	10.6	473.2	8.0	435.0	6.6
1966	587.2	9.0	75.4	14.8	511.9	8.2	458.9	5.5
1967	629.3	7.2	83.0	10.1	546.3	6.7	477.5	4.1
1968	688.7	9.4	97.5	17.5	591.2	8.2	499.0	4.5
1969	748.9	8.7	117.3	20.3	631.6	6.8	511.5	2.5
1970	801.0	7.0	116.3	- 0.9	684.8	8.4	529.8	3.6

Average Annual Rates of Change During Period:

1960-1970	7.2%	8.6%	6.9%	4.5%
1960-1965	6.1	5.2	6.2	5.0
1965-1970	8.2	12.1	7.7	4.0

NOTE: Components may not add to totals because of rounding.

Source: U. S. Department of Commerce

TABLE IV

Aggregate Consumer Purchasing Power

1960-1970

(Billions of Dollars and

Percent Change from Previous Year)

Year	Disposable Personal Income		Net Household Credit		Credits From Government Insurance and Other Adjustments		Aggregate Consumer Purchasing Power (Current \$)		Aggregate Consumer Purchasing Power (1958 \$)	
	(Bil. of \$)	(% Change)	(Bil. of \$)	(% Change)	(Bil. of \$)	(% Change)	(Bil. of \$)	(% Change)	(Bil. of \$)	(% Change)
1960	\$350.0	3.8%	\$17.8	-19.1%	\$ 3.7	8.8%	\$371.5	2.4%	\$359.6	0.7%
1961	364.4	4.1	16.9	- 5.3	4.0	8.1	385.3	3.7	368.4	2.4
1962	385.3	5.7	21.0	24.3	4.1	2.5	410.5	6.5	388.0	5.3
1963	404.6	5.0	27.1	29.0	4.2	2.4	435.9	6.2	406.6	4.8
1964	438.1	8.3	28.1	3.7	4.8	14.3	470.9	8.0	438.5	7.8
1965	473.2	8.0	30.2	7.5	5.7	18.8	509.2	8.1	468.0	6.7
1966	511.9	8.2	23.6	-21.9	6.6	15.8	542.3	6.5	486.4	3.9
1967	546.3	6.7	23.7	0.4	7.0	6.1	577.1	6.4	504.5	3.7
1968	591.2	8.2	34.8	46.8	8.4	20.0	634.4	9.9	535.4	6.1
1969	631.6	6.8	30.7	-11.8	8.7	3.6	671.0	5.8	543.3	1.5
1970	684.8	8.4	20.4	-33.6	10.3	18.4	715.5	6.6	553.4	1.9

Average Annual Rates of Change During Period:

1960-1970	6.9%	1.4%	10.8%	6.8%	4.4%
1960-1965	6.2	11.1	9.0	6.5	5.4
1965-1970	7.7	- 7.6	12.5	7.0	3.4

NOTE: Components may not add to totals because of rounding.

Sources: U. S. Department of Commerce and The Conference Board

TABLE V

Per Capita Income and Purchasing Power

1960-1970

(Dollars and Percent Change from Previous Year)

Year	Per Capita Disposable Personal Income				Per Capita Aggregate Consumer Purchasing Power			
	(Current \$)		(1958 \$)		(Current \$)		(1958 \$)	
		(% Change)		(% Change)		(% Change)		(% Change)
1960	\$1,937	1.7%	\$1,883	0.1%	\$2,056	0.8%	\$1,990	-0.9%
1961	1,983	2.4	1,909	1.4	2,096	1.9	2,004	0.7
1962	2,064	4.1	1,968	3.1	2,199	4.9	2,078	3.7
1963	2,136	3.5	2,013	2.3	2,301	4.6	2,147	3.3
1964	2,280	6.7	2,123	5.5	2,451	6.5	2,283	6.3
1965	2,432	6.7	2,235	5.3	2,617	6.8	2,405	5.3
1966	2,599	6.9	2,331	4.3	2,754	5.2	2,470	2.7
1967	2,744	5.6	2,398	2.9	2,899	5.3	2,534	2.6
1968	2,947	7.0	2,487	3.4	3,163	9.1	2,669	5.3
1969	3,117	5.8	2,525	1.8	3,312	4.7	2,682	0.5
1970	3,344	7.3	2,587	2.5	3,494	5.5	2,702	0.7

Average Annual Rates of Change During Period:

1960-1970	5.6%	3.2%	5.4%	3.1%
1960-1965	4.7	3.5	5.0	3.9
1965-1970	6.6	3.0	5.9	2.3

Sources: U. S. Department of Commerce and The Conference Board

TABLE VI

Consumer Spending

1960-1970

(Billions of Dollars and

Percent Change from Previous Year)

Year	Disposable Personal Income		Personal Consumption Expenditures		Interest Paid by Consumers, and Personal Transfer Payments to Foreigners		Personal Saving	
	(Bil. of \$)	(% Change)	(Bil. of \$)	(% Change)	(Bil. of \$)	(% Change)	(Bil. of \$)	(% Change)
1960	\$350.0	3.8%	\$325.2	4.5%	\$ 7.8	9.9%	\$17.0	-11.0%
1961	364.4	4.1	335.2	3.1	8.1	3.8	21.2	24.7
1962	385.3	5.7	355.1	5.9	8.6	6.2	21.6	1.9
1963	404.6	5.0	375.0	5.6	9.7	12.8	19.9	- 7.9
1964	438.1	8.3	401.2	7.0	10.7	10.3	26.2	31.7
1965	473.2	8.0	432.8	7.9	12.0	12.1	28.4	8.4
1966	511.9	8.2	466.3	7.7	13.0	8.3	32.5	14.4
1967	546.3	6.7	492.1	5.5	13.9	6.9	40.4	24.3
1968	591.2	8.2	535.8	8.9	15.0	7.9	40.4	-0-
1969	631.6	6.8	577.5	7.8	16.5	10.0	37.6	- 6.9
1970	684.8	8.4	616.7	6.8	17.9	8.5	50.2	33.5

Average Annual Rates of Change During Period:

1960-1970	6.9%	6.6%	8.7%	11.4%
1960-1965	6.2	5.9	9.0	10.8
1965-1970	7.7	7.3	8.3	12.1

Source U. S. Department of Commerce

TABLE VII

Relationships Between Income,
Purchasing Power, and Consumption
1960-1970

Year	Personal Consumption Expenditures (Current Dollars)	
	Percent of Disposable Personal Income	Percent of Aggregate Consumer Purchasing Power
1960	92.2%	87.5%
1961	92.0	87.0
1962	92.2	86.5
1963	92.7	86.0
1964	91.6	85.2
1965	91.5	85.0
1966	91.1	86.0
1967	90.1	85.3
1968	90.6	84.5
1969	91.4	86.1
1970	90.1	86.2
Average During Period:		
1960-1970	91.5%	85.9%
1960-1965	92.2	86.2
1965-1970	90.8	85.5

Sources: U. S. Department of Commerce and The
Conference Board

TABLE VIII

Personal Saving
1960-1970
(Billions of Dollars and
Percent Change from Previous Year)

Year	Current Dollars		1958 Dollars		Percent of Disposable Income
	(Bil. of \$)	(% Change)	(Bil. of \$)	(% Change)	
1960	\$17.0	-11.0%	\$16.4	-13.2%	4.9%
1961	21.2	24.7	20.3	23.8	5.8
1962	21.6	1.9	20.4	0.5	5.6
1963	19.9	- 7.9	18.6	- 8.8	4.9
1964	26.2	31.7	24.4	31.2	6.0
1965	28.4	8.4	26.1	7.0	6.0
1966	32.5	14.4	29.1	11.5	6.3
1967	40.4	24.3	35.3	21.3	7.4
1968	40.4	-0-	34.1	- 3.4	6.8
1969	37.6	- 6.9	30.4	-10.9	6.0
1970	50.2	33.5	38.0	27.6	7.3
Average Annual Rates of Change During Period:					
1960-1970		11.4%		9.0%	6.1%
1960-1965		10.8		9.7	5.5
1965-1970		12.1		8.3	6.6

* Personal saving divided by implicit price deflator for personal consumption expenditures.

Source: U. S. Department of Commerce

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