

**Absolute and Relative Income and Consumption
Trends of Married U.S. Households in 1960 and 1996**
or
The Cleavers and Kramdens Meet the Taylors and Connors

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Introduction and Background

The changing standard of living of American households continues to be a key issue in the country. In particular, the notion that it “takes two income to equal one income of previous years” is popularly accepted. In other words, it’s often thought that, in the “good old days,” one worker could support the household provide a standard of living comparable to that provided by two household workers today. The implication is that single-earner households have seen a decline in their income and standard of living in recent decades and only dual-earner households or households moving from single-earner to dual-earner status have increased their financial resources.

The research reported in this paper expands on previous work in two ways. First, it extends the latest year of comparison to 1996, the year of the most recent Consumer Expenditure Survey. Second, in analyzing income and consumption trends, the focus is on the relative position of dual-earners compared to single-earners in the same peer group. We not only want to know how the standards of living of dual-earners and single-earners have changed over time, but also how the living standards of dual-earners *relative* to single-earners have changed. To keep the analysis manageable and straightforward, the comparisons are limited to 1960 and 1996.

Absolute and Relative Real Income Comparisons

Income levels importantly depend upon household age and education. Age determines where within the typical life cycle earnings profile the household is, and education is a major factor affecting occupational availability and earnings.

To accommodate these determinants, households are first divided into four categories: households with young college-educated heads, households with middle-age college-educated heads, households with young non-college-educated heads, and households with middle-age non-college-educated heads. Each of these categories is then subdivided into single-earner households and dual-earner households. “Young” is defined as ages 20 to 35, and “middle-age” includes ages 36 to 55. Households older than 55 were excluded due to the increasing importance of retirement income in that age range. Also, further categorization of households using the age and education of the spouse was precluded by the unavailability of these data in the 1960 Consumer Expenditure Survey.

Data only for full-time workers (those working 35 or more hours per week and 48 or more weeks per year) in married households with complete income records and no public assistance or retirement income are examined. Also, only households with full-time members and with no members other than the head, spouse, and children are included. If children are present, they must be under age 18. These restrictions help insure that similar households are compared and that impacts of social changes like the relative rise of the single-parent household are excluded.

Reductions for taxes include all federal, state, and local taxes, including FICA taxes. To adjust for household size, “per equivalent adult (pea)” calculations are made. These calculations are based on the household size scale of $(A + PK)^F$, where A is the number of adults, K is the number of children, P is child consumption as a percentage of adult consumption, and F is an economy of scale factor. Following the recommendations of Citro and Michael (1995), both P and F are set at 0.7.

Two alternative inflation adjusters are used, the Consumer Price Index (CPI) and the chain price index for personal consumption expenditures (PCEPI). Both indices have advantages and disadvantages (Clark, 1999). The CPI shows more aggregate inflation from 1960 to 1996: 430% for the CPI vs. 380% for the PCEPI.

Table 1 gives the real after-tax income and demographic characteristics for households with college-educated heads in 1960 and 1996. Perhaps the most noteworthy finding from Table 1 is that real after-tax income increased for all four age and earner categories, and by substantial amounts. As expected, real gains are greater

using the PCEPI than the CPI. Also, the real income gains are greater for dual-earner households than for single-earner households for young households, but the reverse is the case for middle-age households.

There were only slight increases in the average household head age from 1960 to 1996 in each of the categories, but the average number of children declined substantially in all four classifications. Consequently, the increases in real after tax income per equivalent adult (pea) are greater than the increases when total household income is used.

Trends in the relative position of dual-earner households to single-earner households is measured by the line labeled "after-tax income ratio, dual/single." The numbers are simply the ratio of dual-earner income to single-earner income for the given year. For young households with a college-educated head, the ratio increases from 1960 to 1996 when total income is used, but shows no change on a per equivalent adult basis. For middle-age households, the ratio declines for both total income and income per equivalent adult. Thus, it can be argued that the relative income position of dual-earner households to single-earner households remained the same or narrowed between 1960 and 1996 for households with a college-educated head, especially when adjustments are made for changes in household size.

Table 1
After-Tax Real Income and Demographic Characteristics of Married Households with Full-Time Workers and a College-Educated Head, 1960 and 1996 (\$ in 1996\$)

	1960	(pea)	1996	(pea)	% Chg.	(pea)
<u>Young households, dual-earners</u>						
After-tax income, PCEPI	\$41,318	(\$21,861)	\$60,741	(\$32,656)	47.0%	(49.4%)
After-tax income, CPI	\$45,622	(\$24,139)	\$60,741	(\$32,656)	33.1%	(35.3%)
Household head age	29.9		30.6		2.3%	
Number of children	0.68		0.60		-11.8%	
<u>Young households, single-earners</u>						
After-tax income, PCEPI	\$38,630	(\$16,096)	\$50,043	(\$23,944)	29.5%	(48.8%)
After-tax income, CPI	\$42,654	(\$17,773)	\$50,043	(\$23,944)	17.3%	(34.7%)
Household head age	30.8		31.4		1.9%	
Number of children	2.13		1.23		-42.3%	
After-tax income ratio, dual/single	1.07	(1.36)	1.21	(1.36)	13.1%	(0.0%)
<u>Middle-age hh's, dual-earners</u>						
After-tax income, PCEPI	\$52,757	(\$24,769)	\$71,544	(\$36,317)	35.6%	(46.6%)
After-tax income, CPI	\$58,252	(\$27,348)	\$71,544	(\$36,317)	22.8%	(32.8%)
Household head age	43.8		44.3		1.1%	
Number of children	1.34		0.91		-32.1%	
<u>Middle-age hh's, single-earners</u>						
After-tax income, PCEPI	\$48,302	(\$19,715)	\$71,070	(\$30,900)	47.1%	(56.7%)
After-tax income, CPI	\$53,333	(\$21,769)	\$71,070	(\$30,900)	33.3%	(41.9%)
Household head age	42.1		43.5		3.3%	
Number of children	2.27		1.84		-18.9%	
After-tax income ratio, dual/single	1.09	(1.26)	1.01	(1.18)	-7.3%	(-6.3%)

pea = per equivalent adult

Source: 1960, 1996 Consumer Expenditure Surveys

Table 2 presents the income trends and demographic information for households with non-college educated heads in 1960 and 1996. The lower panel shows that middle-age households with a non-college-educated head have fared similarly to households with college-educated heads. Real gains were registered for total after-tax income using both the CPI and PCEPI deflators. On a per equivalent adult basis, the percentage gains were all in double digits; however, using the pea measure, the gains were all less than for middle-age households with a college-educated head.

The upper panel of Table 2 is a different story. Young households with a non-college-educated head and with dual-earners had real income gains from 1960 to 1996; however, similar households with single-earners

experienced very small real income increases using the PCEPI deflator and real income declines using the CPI deflator.

An important finding from Table 2 is that the relative income position of single-earner households compared to dual-earner households deteriorated between 1960 and 1996 using both total income comparisons and per equivalent adult comparisons. Using total income, young dual-earner households with a non-college-educated head had 29% more income in 1960 than similar single-earner households, in 1996 this increased to 53%. Using the income per equivalent adult measure, the increase was from 54% to 78%.

The same trend occurred for middle-age households with a non-college-educated head. Using total income, dual-earners had 19% more income than single-earners in 1960; by 1996, they had 40% more income. Per equivalent adult, the dual-earner income premium rose from 35% to 51%.

Table 2

After-Tax Real Income and Demographic Characteristics of Married Households with Full-Time Workers and a Non-College Educated Head, 1960 and 1996 (\$ in 1996\$)

	1960	(pea)	1996	(pea)	% Chg.	(pea)
<u>Young households, dual-earners</u>						
After-tax income, PCEPI	\$33,653	(\$16,257)	\$40,893	(\$20,144)	21.5%	(23.9%)
After-tax income, CPI	\$37,158	(\$17,951)	\$40,893	(\$20,144)	10.1%	(12.2%)
Household head age	29.9		29.6		-1.0%	
Number of children	1.19		1.08		-9.2%	
<u>Young households, single-earners</u>						
After-tax income, PCEPI	\$26,146	(\$10,543)	\$26,718	(\$11,321)	2.2%	(7.4%)
After-tax income, CPI	\$28,869	(\$11,641)	\$26,718	(\$11,321)	-7.5%	(-2.7%)
Household head age	30.0		30.7		2.3%	
Number of children	2.36		2.03		-14.0%	
After-tax income ratio, dual/single	1.29	(1.54)	1.53	(1.78)	18.6%	(15.6%)
<u>Middle-age hh's, dual-earners</u>						
After-tax income, PCEPI	\$36,230	(\$17,760)	\$50,263	(\$25,258)	38.7%	(42.2%)
After-tax income, CPI	\$40,004	(\$19,610)	\$50,263	(\$25,258)	25.6%	(28.8%)
Household head age	44.5		43.7		-1.8%	
Number of children	1.09		0.97		-11.0%	
<u>Middle-age hh's, single-earners</u>						
After-tax income, PCEPI	\$30,552	(\$13,112)	\$36,019	(\$16,753)	17.9%	(27.8%)
After-tax income, CPI	\$33,735	(\$14,480)	\$36,019	(\$16,753)	6.8%	(15.7%)
Household head age	43.7		43.7		0.2%	
Number of children	1.94		1.41		-17.3%	
After-tax income ratio, dual/single	1.19	(1.35)	1.40	(1.51)	17.6%	(11.9%)

pea = per equivalent adult

Source: 1960, 1996 Consumer Expenditure Survey

So, there are two major findings of the analysis to this point. First, seven of the eight age/education/number of worker household categories had increases in real after-tax income from 1960 to 1996, on both a total income basis and a per equivalent adult basis. The exception is young, single-earner households with a non-college educated head. Second, the income position of single-earner households relative to dual-earner households declined between 1960 and 1996 for both young and middle-age households with a non-college educated head.

Absolute and Relative Real Consumption Comparisons

Since consumption is importantly determined by household size, real consumption per equivalent adult is examined. Also, although there are both CPI and PCEPI deflators available for specific consumer expenditure categories, CPI deflators are used because they are based on the same classification scheme as the Consumer Expenditure Survey.

Households with a College-Educated Head

Table 3 gives the real spending and savings of married households with full-time workers and college educated heads, per adult equivalent. Shares of total before-tax income are in parentheses next to the amounts in the first four columns. In the last two columns are the ratios of spending and savings amounts for dual-earner households compared to single-earner households.

The spending categories are based on Consumer Expenditure Survey classifications. Food includes both food at-home and away-from-home. Housing includes spending on shelter and on household equipment and operations and utilities. Other consumption adds spending on alcohol and tobacco, entertainment, personal care, education and reading, personal insurance, cash contributions, and miscellaneous spending.

The most consistent finding from the table is that income shares fell for all consumption categories, except one. The exception is transportation spending. In contrast, income shares rose for taxes for three of the four household categories – the exception being middle-age dual-earners – and income shares rose substantially for savings for all household groups.

Turning now to the trends in the real dollar amounts of spending and saving in Table 3, real spending increased for housing, transportation, other consumption, and taxes for all household groups. Real savings also increased for each group. In contrast, real spending decreased for each of the four household groups for food and health. Real apparel expenditures increased for single-earner households but decreased for dual-earner households.

Table 3
Real Spending and Saving of Married Households with Full-Time Workers and College-Educated Head, Adjusted for Household Size, 1960 and 1996 (1996\$ used for CPI)

	Single-Earners		Dual-Earners		Ratio, Dual/Single Earners	
	1960	1996	1960	1996	1960	1996
Young Households						
Food	\$3353 (16.2)	\$3034 (10.5)	\$3942 (13.4)	\$3022 (7.4)	1.18	1.00
Housing	\$6093 (29.4)	\$7490 (26.1)	\$7620 (25.8)	\$9427 (23.2)	1.25	1.26
Apparel	\$ 791 (3.8)	\$ 884 (3.1)	\$1242 (4.2)	\$1210 (3.0)	1.57	1.37
Transportation	\$2040 (9.8)	\$5272 (18.3)	\$2911 (9.9)	\$4521 (11.2)	1.43	0.86
Health	\$1819 (8.8)	\$ 978 (3.4)	\$1776 (6.0)	\$ 859 (2.1)	0.98	0.88
Other Consump.	\$3231 (15.6)	\$3703 (12.9)	\$4655 (15.8)	\$5052 (12.5)	1.44	1.36
Taxes	\$2942 (14.2)	\$4815 (16.7)	\$5353 (18.1)	\$7889 (19.5)	1.82	1.64
Savings	\$ 446 (2.2)	\$2582 (9.0)	\$1991 (6.8)	\$8566 (21.1)	4.46	3.32
Total	\$20715 (100)	\$28759 (100)	\$29492 (100)	\$40545 (100)	1.42	1.41
Middled-age hh's						
Food	\$4117 (15.8)	\$3316 (8.9)	\$4515 (13.1)	\$3999 (8.9)	1.10	1.21
Housing	\$6827 (26.2)	\$8690 (23.2)	\$7569 (21.9)	\$9696 (21.5)	1.11	1.12
Apparel	\$1191 (4.6)	\$1210 (3.2)	\$1344 (3.9)	\$1305 (2.9)	1.13	1.08
Transportation	\$2329 (9.0)	\$3437 (9.2)	\$3146 (9.1)	\$5595 (12.4)	1.35	1.63
Health	\$2136 (8.2)	\$1237 (3.3)	\$2591 (7.5)	\$ 831 (1.8)	1.21	0.67
Other Consump.	\$4684 (18.0)	\$5151 (13.8)	\$5820 (16.8)	\$5969 (13.3)	1.24	1.16
Taxes	\$4249 (16.3)	\$6549 (17.5)	\$7214 (20.9)	\$8677 (19.3)	1.70	1.10
Savings	\$ 484 (1.9)	\$7859 (20.9)	\$2364 (6.8)	\$8921 (19.9)	4.88	1.14
Total	\$26018 (100)	\$37449 (100)	\$34562 (100)	\$44994 (100)	1.33	1.20

Expenditures are per equivalent adult.

Source: Author's calculations of Consumer Expenditure Survey data.

The decrease in real food expenditures per equivalent adult is, quite frankly, curious, and may reflect some problems with the food price deflator. A likely explanation for the reduction in health expenditures per equivalent adult, which dropped almost 50% for each of the household groups, is the expansion of employer provided health insurance between 1960 and 1996. The reduction in real apparel expenditures for dual-earners may have two explanations. One may be increased economies-of-scale in apparel use between 1960 and 1996 for dual-earner households; however, it is hard to think of reasonable examples of apparel sharing by spouses. A second explanation may be changes in apparel standards in the workplace that allowed less expensive work clothes to be

bought and worn in 1996 than in 1960. Such a change would have a greater impact on dual-earner households than on single-earner households.

The last two columns of Table 3 show how the relative consumption of dual-earner households with a college-educated head compared to the consumption of single-earner households changed between 1960 and 1996. For young households, the biggest change was for transportation. In 1960, dual-earners consumed 43% more transportation services than single-earners, but in 1996, they consumed 14% less. With the exception of the largest spending category, housing, and health, the relative consumption and savings of young dual-earners and young single-earners became closer from 1960 to 1996. For middle-age households, relative spending became closer for apparel, other consumption, taxes, and for savings, and became more diverse for food, housing, transportation, and health.

Households with a Non-College Educated Head

Table 4 gives similar real spending and savings trends for households with a non-college educated head. Looking at the income share trends for each of the four household groups, income shares again fell for all consumption categories except transportation and taxes, where they rose. Also, income shares rose for savings from 1960 to 1996.

Table 4

Real Spending and Saving of Married Households with Full-Time Workers and Non-College Educated Head, Adjusted for Household Size, 1960 and 1996 (1996\$ using CPI)

	Single-Earners		Dual-Earners		Ratio, Dual/Single Earners	
	1960	1996	1960	1996	1960	1996
Young Households						
Food	\$2802 (21.5)	\$2118 (15.4)	\$3338 (15.5)	\$2504 (10.1)	1.19	1.18
Housing	\$3990 (30.6)	\$4011 (29.2)	\$5867 (27.3)	\$5991 (24.3)	1.47	1.49
Apparel	\$ 613 (4.7)	\$ 550 (4.0)	\$1028 (4.8)	\$ 644 (2.6)	1.68	1.17
Transportation	\$1746 (13.4)	\$2706 (19.7)	\$2669 (12.4)	\$4408 (17.9)	1.53	1.63
Health	\$1312 (10.1)	\$ 653 (4.8)	\$1552 (7.2)	\$ 777 (3.2)	1.18	1.19
Other Consump.	\$2352 (18.1)	\$1695 (12.4)	\$3113 (14.4)	\$2662 (10.8)	1.32	1.60
Taxes	\$1374 (10.6)	\$2402 (17.5)	\$3564 (16.6)	\$4509 (18.3)	2.59	1.88
Savings	-\$1174 (-9.0)	-\$411 (-3.0)	\$3841 (1.8)	\$3159 (12.8)	1.33 ¹	8.69 ²
Total	\$13015 (100)	\$13723 (100)	\$21515 (100)	\$24653 (100)	1.65	1.80
Middled-age hh's						
food	\$3314 (19.9)	\$2535 (12.4)	\$4000 (17.0)	\$3025 (9.6)	1.21	1.19
Housing	\$4309 (25.9)	\$4830 (23.5)	\$5320 (22.6)	\$6524 (20.8)	1.23	1.35
Apparel	\$ 757 (4.6)	\$ 739 (3.6)	\$1057 (4.5)	\$ 974 (3.1)	1.40	1.32
Transportion	\$1685 (10.1)	\$4402 (21.5)	\$2746 (11.6)	\$4318 (13.7)	1.63	0.98
Health	\$1554 (9.3)	\$1084 (5.3)	\$1910 (8.1)	\$ 970 (3.1)	1.23	0.89
Other Consump.	\$2652 (15.9)	\$2794 (13.6)	\$3818 (16.2)	\$4032 (12.8)	1.44	1.44
Taxes	\$2191 (13.1)	\$3758 (18.3)	\$3949 (18.8)	\$6187 (19.7)	1.80	1.65
Savings	\$ 207 (1.2)	\$ 369 (1.8)	\$ 761 (3.2)	\$5416 (17.2)	3.68	14.68
Total	\$16671 (100)	\$20511 (100)	\$23559 (100)	\$31445 (100)	1.41	1.53

¹Calculated as (384 + 1174)/1174

²Calculated as (3159 + 411)/411

Expenditures are per equivalent adult.

Source: Author's calculations of Consumer Expenditures Survey data.

Real spending amounts increased between 1960 and 1996 for young households for housing, transportation, taxes, and for savings and decreased for food, apparel, health, and other consumption. For middle-age households, real spending amounts increased for housing, transportation, other consumption, taxes and for savings, and decreased for food, apparel, and health.

These spending trends are similar to those for college educated heads except for other consumption. Real spending on other consumption declined for young households with a non-college educated head, whereas this spending increased for the other groups; however, young households with a non-college educated head had the slowest income gains over the period, on a per equivalent adult basis, or, in the case of single-earners, had outright real income losses. These income trends were apparently reflected in the trends for other consumption.

The biggest differences in the results for Table 4 and Table 3 are in the changes in relative spending for dual and single-earners. For young households with a non-college educated head, the ratio of dual-earner spending to single-earner spending increased for housing, transportation, health, other consumption, and savings, and only decreased for food, apparel and taxes. Thus, the spending gap between dual-earners and single-earners expanded between 1960 and 1996 in most spending categories for these households.

For middle-age households with a non-college-educated head, the spending gap between dual-earners and single-earners increased only for housing expenditures and for savings; however, the increases in these ratios were relatively large, plus the declines in the other relative spending ratios were modest.

So Why Might Single-Earner Households Feel Bad?

The analysis has revealed that with the exception of young single-earner households with a non-college-educated head, snapshots of similar households in 1960 and in 1996 show that the real after-tax incomes of dual-earners and single-earners alike increased. Why, then, does the popular wisdom hold that families must have two workers today to “get ahead”, and that the standard of living of single-earner families has deteriorated over the past almost 40 years?

The answer may lie in the trends for *relative* real income and real consumption. Using total after-tax income, the ratio of the real income of dual-earners to the real income of single-earners *increased* for three of the four household groups between 1960 and 1996, the exception being middle-age households with a college-educated head. Using after-tax income per adult equivalent, the ratio of dual-earners’ real income to single-earners’ real income increased for two of the four household groups – both of those with non-college-educated heads. Also, the increase in the ratio was very substantial for both these household groups.

Among consumption categories, two that are obvious and visible to people are housing and transportation. Thus, in judging the standard of living of a neighbor, it could be argued that housing and transportation are likely used as important benchmarks.

Importantly, the ratio of real housing consumption per adult equivalent for dual-earners compared to single-earners *increased for all four household groups*. The ratio of real transportation consumption per adult equivalent for dual-earners compared to single-earners increased for two of the four household groups.

The “bottom lines” are these. Young single-earner households with a non-college-educated head have a legitimate reason to be concerned about trends in their standard of living. Using the CPI deflator, their standard of living, as measured by real after-tax income, has deteriorated from 1960 to 1996. Using the PCEPI deflator, their standard of living gains have been very small.

Other single-earner households may feel bad not because their real income has fallen since 1960 (which it hasn’t), but because their real income and real spending on some important and obvious consumption categories, like housing, have not risen as fast as for dual-earners. Thus, relative to dual-earners, these single-earner households have fallen behind.

Summary

In examining changes in the standard of living of married American households over the past almost four decades, there are “good news” results and “bad news” results. One piece of good news is that the real after-tax income of most household types increased over the period. In addition, real spending per equivalent adult increased on most consumption categories, as did savings.

The bad news is that one household group has clearly been left behind – young households with a non-college-educated head. By some measures, real after-tax income of this group fell from 1960 to 1996, and by other measures the increase was very modest. The reason for this trend is likely the changing structures and rewards in the economy over the past 40 years, which have dramatically increased the returns to education.

Another finding is that the *relative* position of many single-earner households compared to dual-earner households in the same peer group fell between 1960 and 1996. So, even though these single-earner households in 1996 are better-off than their counterparts in 1960, their relative position to dual-earner households deteriorated over the period.

Judging the changing standard of living of households is a difficult task, yet it is crucially important. This paper has stressed the possible different conclusions reached when absolute comparisons are made in contrast to relative comparisons. Clearly, how one views the world depends on the prism used.

References

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Endnotes

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