Are Two Incomes Needed to Get Ahead Today?: Evidence from the 1960s to the 1990s

Data from the Consumer Expenditure Surveys and the Panel Study of Income Dynamics are used to examine changes in real after-tax incomes of single earner and dual earner households from the 1960s to the 1990s. The findings indicate that dual earner households experienced significant real income gains, whereas many single earner households suffered income losses since 1972. Work hours and occupation account for much of the differences in household income trends.

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Introduction

One of the recent features of the American economy has been the rise of the dual worker household. Dual worker households increased from 43% of all married couple households in 1967 to 60% in 1992. The jump in dual worker households has been fueled by the increase in married women who work. Working married women rose from 32% of all married women in 1960 to almost 60% in 1991 (Rubin and Riney, 1995, pp. 18-19).

Several reasons have been cited to explain the increase in working married women and the dual worker household. Included are the rise of feminism and women's rights and the changing nature of jobs that has made them more appealing to women.

The popular notion in American society is that dual worker households are necessary to maintain a decent standard of living in today's economy (Wessel and Davis, 1995). This viewpoint implies that single worker household's standard of living is lower today than in previous decades. Higher taxes are often mentioned as the reason for this situation. It's often said of dual worker households, that one worker is needed today to pay the taxes while the other worker pays to feed, clothe, and house the family.

The question of why more households today have two workers goes beyond an issue of dollars and cents. Dual worker households spend less time with children than do married single worker households (Bryant and Zick, 1996). Some analysts have asked whether reduced parental time with children can be linked to various youth problems, such as juvenile crime and low educational performance (Rector and Hirni, 1996).

The issue can be framed in this way. Do more households today have two workers because they must in order to survive economically, and hence the impacts on parental time are an unfortunate consequence? Or, do more households have two workers because they desire increased real income, and these households willingly trade parental time or work time?²

These are weighty questions which are at the core of much of the change in American families over the past half century. This paper addresses a part of the implied research agenda by focusing on one of the central questions: has the standard of living of married single worker households fallen in recent decades, while the standard of living of dual married worker households has stabilized or risen? To answer the question, data from the Consumer Expenditure Surveys are examined.

Related Work

There are several bodies of work related to the issue of the standard of living of American families in recent decades. Phillips (1990) and Bluestone and Harrison (1988) have supposedly documented a drop in the real income of the average American family since the early 1970s.

McKenzie (1997) has criticized these results. McKenzie claims the inflation adjustor used by Phillips, Bluestone/Harrison and others, the Consumer Price Index (CPI), has overstated the rise in prices and thus understated real income gains. The recent Boskin Commission (Advisory Commission to Study the Consumer Price Index, 1996) supports this conclusion. McKenzie also says the declining size of the American family means that real consumption per family has not declined as much as indicated by Phillips and others. When McKenzie reduces the annual CPI by the 1.3 percentage points recommended by the Boskin Commission, he finds the average real incomes of American families to have risen during the past twenty five years.³

Cox and Alm (1993) measured changes in the average consumption of actual household products, such as housing space, televisions, air conditioners, and automobiles. They found increases in average consumption for the 1970-1990 period.

Sawhill and Condon (1992) examined the changes in real incomes of the *same* households for the period 1977 to 1986 using the University of Michigan's Panel Study of Income Dynamics. They found real income increases for households of all income levels. However, they did not do separate analyses for married dual earner and married single earner households.

The work of Rubin and Riney (1995) is closest to the analysis presented in this paper. Unlike the research cited above, Rubin and Riney directly examined the real income changes of dual and single earner households. Using Consumer Expenditure Survey data from the U.S. Bureau of Labor Statistics, they found the average household real after-tax income of married single earner households fell \$1600 (1986 dollars) between 1973 and 1986, while the same measure rose \$800 for married dual earner households (Rubin and Riney, 1995, pp. 102-103).

One other line of research is relevant. Several analysts (see Bradbury, 1996, for a review) have examined the *distribution* of household income and have documented a growing disparity in the distribution. The percentages of households in the upper and lower segments of the income distribution have increased, while the percentage in the middle segments has dropped.

This review of related research suggests several considerations for new inquiries. The time period of the Rubin and Riney work is short, spanning only thirteen years. Also, one reason for their findings of poor real income growth is that the time period (1973-86) includes two recessions. It would be good to expand the time period of this analysis.

McKenzie and the Boskin Commission raise the issue of the correct inflation adjustor. All the studies except McKenzie's use the CPI as the adjustor. If, indeed, the CPI overstates price increases, then household real income gains have been understated in all the studies except McKenzie's. It's important for new work to carefully consider the inflation adjustor.

McKenzie and Cox/Alm also emphasize the importance of studying real consumption trends in addition to changes in real income. In addition, McKenzie thinks it's important to consider the impact of family size on real consumption trends.

The work of Sawhill and Condon is unique in tracking income changes of the same households. In contrast, the periodic samples in the Consumer Expenditure Surveys are not of the same households. The work of Sawhill and Condon should be extended to look at real income changes in married single earner and married dual earner households.

Finally, the work on income disparity shows it's important to not only look at changes in average income, but also at changes in the distribution of average income over time.

Analysis With Consumer Expenditure Survey Data

In this section, changes in the standard of living of households with different work statuses are examined using Consumer Expenditure Survey data from 1960, 1972, 1984, and 1994 (United States Bureau of Labor Statistics). The 1960 survey was the earliest available from the Bureau of Labor Statistics, and the 1994 set was the latest available at the time of the analysis.

Data for only full-time workers (those working 35 or more hours per week) with complete income records and no public assistance or retirement income are examined. Also, only households with full-time members, with children under age 18 who did not work, and with no members other than the head, spouse, and children are included. Reductions for taxes include all federal, state, and local taxes, including FICA taxes.

For each year, two age groups are analyzed, young households (those with a head from 20 to 35 years old) and middle aged household (those with a head from 36 to 55 years old). Further, each age group is divided into six household size categories: no children, one child, two children, three children, four children, and five or more children. Last, three household earning types are studied: married dual earners, married single earners, and non-married single earners.

A major consideration was the proper inflation adjustor. The CPI was rejected because of its well documented problems.⁴ However, the adjustment used by McKenzie seemed arbitrary. Instead, the implicit price deflator for personal consumption expenditures (IPD-PCE) is used as the inflation adjustor. It corrects the market basket and outlet problems of the CPI by being based on the actual products purchased by consumers each year.⁵

Trends in total real consumption are presented in Table 1.6 For ease of comparison, values are presented as a ratio of the household type's 1960 value. For example, the 1.16 entry in 1972 for young married dual earner

households with no children means average real consumption for that household type was 16% higher in 1972 than in 1960.

The real consumption levels of most household types is higher in 1994 than in 1960. In 30 of the 31 cases for which comparisons are available, the real consumption level is higher in 1994 than in 1960 (young married single earner households with four children is the lone exception).

However, when 1972 is the base of comparisons, the results are different. In nine of the 30 cases for which comparisons are available, the real consumption level in 1994 is lower than in 1972. Seven of these cases are young households, and four of these are young married single earner households. Thus, in the five cases for which comparisons can be made between 1972 and 1994, real consumption fell in four of the household categories for young, married single earner households.

Table 1
Real Consumption for Young and Middle Aged Households

Head 2	0 to 35	Years O	ld										
	Marrie	ed Dual	Earners		Mar	ried Sing	gle Earne	er		Unmai	ried Sin	gle Earn	er
Num.	1960	1972	1984	1994	1960	1972	1984	1994		1960	1972	1984	1994
Chd.													
0	1.00	1.16	1.24	1.27	1.00	1.49	1.01	1.40	1.40	1.16	1.18	1.10	1.10
1	1.00	1.06	1.14	1.17	1.00	1.15	0.91	1.16	1.16	1.45	1.65	1.61	1.61
2	1.00	1.21	1.10	1.14	1.00	1.06	1.12	1.03	1.03	1.00	1.01	1.13	1.12
3	1.00	1.18	1.02	1.30	1.00	1.11	0.95	1.01	1.01	1.00	1.20	1.59	1.58
4	1.00	1.26	1.06	1.18	1.00	1.21	0.90	0.85	0.85	1.00	n.a.	1.09	n.a.
5 &	1.00	1.11	n.a.	n.a.	1.00	1.10	0.85	n.a.	n.a.	1.00	n.a.	n.a.	n.a.
more													
Head 3	6 to 55 Y	Years Ol	d										
	Marrie	d Dual	Earners			Mai	ried Sin	gle Earne	er	Unma	arried Sir	ngle Earn	ner
Num.	1960	1972	1984	1994		1960	1972	1984	1994	1960	1072	1094	1004

	Married Dual Earners						ried Sing	gle Earne	Unma	Unmarried Single Earner				
Num. Chd.	1960	1972	1984	1994		1960	1972	1984	1994	1960	1972	1984	1994	
0	1.00	1.29	1.44	1.45		1.00	1.34	1.35	1.51	1.00	1.37	1.57	1.50	
1	1.00	1.18	1.24	1.23		1.00	1.27	1.10	1.37	1.00	1.21	1.12	1.30	
2	1.00	1.26	1.39	1.24		1.00	1.12	1.17	1.38	1.00	1.27	1.60	1.07	
3	1.00	1.18	1.02	1.22		1.00	1.16	1.24	1.39	1.00	n.a.	1.22	1.61	
4	1.00	1.38	1.57	1.42		1.00	1.23	0.99	1.23	1.00	2.48	n.a.	3.02	
5 & more	1.00	1.03	0.66	1.20		1.00	1.15	n.a.	1.21	1.00	1.14	n.a.	n.a.	
more														

n.a.=data not available due to small sample sizes Source: Consumer Expenditure Surveys

Table 2 shows the trends in real after-tax income for the same CES data of young and middle aged households. The trends are similar to those found for real consumption. Comparing 1994 to 1960, real after-tax income is higher in 1994 in 28 of 31 cases. However, comparing 1994 to 1972, real income is lower in 1994 in 18 of 30 cases. Furthermore, of these 18 cases, 9 are for married single earners and 3 are for married dual earners.

Table 3 shows trends in the distribution of gross household income by presenting the coefficient of variation (CV) for each household category. A higher CV indicates a relatively larger variation around the mean. Comparing 1994 to 1960, the CV is higher in 1994 in twelve of the 31 cases. But, comparing 1994 to 1972, the CV is higher in 1994 in 18 of 30 cases.

Table 2.
Real After Tax Income Trends for Young and Middle Aged Households

Head 2		d Dual I			Mai	rried Sin	gle Earne	<u>er</u>	Ţ	Inmarrie	d Single	Earner
Num.	1960	1972	1984	1994	1960	1972	1984	1994	1960	1972	1984	1994
Chd.	1.00	1 2 1	1.39	1.41	1.00	1.29	0.88	1.20	1.00	1.16	1.13	1.14
0	1.00	1.31				1.19	1.07	1.32	1.00	1.32	1.41	1.29
1	1.00	1.15	1.26	1.45	1.00					1.04	1.00	1.13
2	1.00	1.29	1.20	1.27	1.00	1.26	1.07	0.87	1.00			
3	1.00	1.29	0.86	1.43	1.00	1.23	1.25	1.18	1.00	1.48	1.48	1.04
4	1.00	1.42	1.02	1.23	1.00	1.33	0.98	0.74	1.00	n.a.	1.08	n.a.
5 &	1.00	1.41	n.a.	n.a.	1.00	1.17	1.06	n.a	1.00	n.a.	n.a.	n.a.
more												
Head 3		Years Ol				e Maria Partingu	ار قادر . دراناند د		n Li hi6 J	ţ.''	1.01 1	
Head 3		Years Ol ed Dual l			Ma		gle Earn			Jnmarrie		
Head 3				1994	<u>Ma</u> 1960	rried Sin 1972	gle Earn 1984	<u>er</u> 1994	<u>L</u> 1960	Jnmarrie 1972	d Single 1984	Earner 1994
	Marrie	ed Dual l	Earners	1994	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1972	1984	1994	1960	1972	1984	1994
Num.	Marrie	ed Dual l	Earners	1994 1.70	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		a factorization and		1960	1972 2.47	1984 1.74	
Num. Chd.	<u>Marrie</u> 1960 1.00	1972 1.55	1984 1.57		1960	1972	1984	1994	1960	1972	1984	1994
Num. Chd. 0	Marrie 1960 1.00 1.00	1972 1.55 1.47	1984 1.57 1.35	1.70 1.73	1960	1972 1.62	1984 1.50	1994 1.37	1960	1972 2.47	1984 1.74	1994 1.61
Num. Chd. 0 1	Marrie 1960 1.00 1.00 1.00	1972 1.55 1.47 1.52	1984 1.57	1.70	1.00 1.00	1972 1.62 1.49	1984 1.50 1.21	1994 1.37 1.18	1.00 1.00	1972 2.47 1.40	1984 1.74 1.26	1994 1.61 1.43
Num. Chd. 0 1 2	Marrie 1960 1.00 1.00 1.00 1.00	1.55 1.47 1.52 1.29	1984 1.57 1.35 1.50 1.09	1.70 1.73 1.53 1.70	1960 1.00 1.00 1.00	1.62 1.49 1.32	1.50 1.21 0.97	1994 1.37 1.18 1.26	1.00 1.00 1.00 1.00	1972 2.47 1.40 1.33	1984 1.74 1.26 2.00	1994 1.61 1.43 1.16
Num. Chd. 0 1 2 3 4	Marrie 1960 1.00 1.00 1.00 1.00	1.55 1.47 1.52 1.29 1.80	1.57 1.35 1.50 1.09 1.10	1.70 1.73 1.53 1.70 1.34	1.00 1.00 1.00 1.00	1.62 1.49 1.32 1.32	1.50 1.21 0.97 1.27	1994 1.37 1.18 1.26 1.36	1.00 1.00 1.00 1.00 1.00	1972 2.47 1.40 1.33 n.a.	1984 1.74 1.26 2.00 1.30	1.61 1.43 1.16 1.67
Num. Chd. 0 1 2	Marrie 1960 1.00 1.00 1.00 1.00	1.55 1.47 1.52 1.29	1984 1.57 1.35 1.50 1.09	1.70 1.73 1.53 1.70	1.00 1.00 1.00 1.00 1.00	1972 1.62 1.49 1.32 1.32 1.48	1984 1.50 1.21 0.97 1.27 0.91	1994 1.37 1.18 1.26 1.36 1.03	1.00 1.00 1.00 1.00 1.00	1972 2.47 1.40 1.33 n.a. 2.25	1984 1.74 1.26 2.00 1.30 n.a.	1.61 1.43 1.16 1.67 1.03

Table 3.

<u>Trends in the Coefficient of Variation of Gross Income for Young and Middle Aged Households</u>

Head 20 to 35 Years Old

Married Dual Earners						Mai	ried Sin	gle Earn	Unmarried Single Earner				
Num.	1960	1972	1984	1994		1960	1972	1984	1994	1960	1972	1984	1994
Chd.													
0	0.56	0.36	0.50	0.49		1.06	0.56	0.93	0.61	0.73	0.51	0.74	0.66
1	0.44	0.39	0.52	0.53		0.72	0.37	0.63	0.71	0.42	0.37	0.66	0.41
2	0.54	0.47	0.53	0.46		0.75	0.48	0.66	0.52	0.45	0.80	0.50	0.48
3	0.47	0.60	0.79	0.46		0.64	0.50	0.52	0.52	0.40	0.10	0.61	0.34
4	0.39	0.57	0.36	0.43		0.65	0.50	0.32	0.52	0.03	n.a.	0.11	n.a.
5 &	0.41	0.44	n.a.	n.a.		0.64	0.45	0.39	n.a.	0.21	n.a.	n.a.	n.a.
more													
Head 3		Years Ol				1.0					المريدمي	10' 1	Г
	Marrie	ed Dual l	Earners			Ma		gle Earn	and the second second		<u>Jnmarrie</u>		
Num.	1960	1972	1984	1994		1960	1972	1984	1994	1960	1972	1984	1994
Chd.								To the	er_nr	2 22		0.70	0.61
0	0.56	0.39	0.58	0.53		0.63	0.59	0.79	0.56	0.60	5.74	0.78	0.61
1	0.48	0.57	0.66	0.51		0.54	0.70	0.70	0.57	0.53	0.64	0.52	0.55
2	0.36	0.49	0.53	0.56		0.67	0.67	0.99	0.52	0.67	0.56	0.62	0.46
3	0.58	0.37	0.47	0.55		0.68	0.62	0.81	0.72	0.29	n.a.	0.56	0.49
4	0.39	0.55	0.60	0.35		0.61	0.54	0.59	0.65	0.46	0.07	n.a.	0.39
5 &	0.44	0.27	0.46	0.31		0.58	0.43	1.09	0.70	0.47	0.59	n.a.	n.a.
more													

Conclusion

Married single earner households have a point in claiming that their incomes have not kept up with the incomes of married dual income households. Comparing 1994 to 1960 with Consumer Expenditure Survey (CES) data, real after-tax income of virtually all household categories increased. However, comparing 1994 to 1972, the real after tax income of several married single earner households fell, while the same measure for married dual earner households rose. These results were found after using a more modest inflation adjustor than the much-criticized Consumer Price Index. Also, the results for married single earner households cannot be totally accounted for by higher tax burdens.

This work should be viewed as one part of a larger research agenda which investigates the work and household time choices of American families and the implications of these choices for a wide range of social issues. Establishing and understanding the income trends of American families is just the first step in this agenda.

References

Advisory Commission to Study the Consumer Price Index (1996). <u>Toward a more accurate measure of the cost of living</u>. Washington. D.C.: Senate Finance Committee.

Bluestone, B. & Harrison, B. (1988). The great U-turn. New York: Basic Books.

Bradbury, K. L. (1996). The growing inequality of family incomes: Changing families and changing wages. New England Economic Review, July/August, 55-82.

Bryant, W. K., & Zick, C. (1996). Are we investing less in the next generation? Historical trends in time spent caring for children. <u>Journal of Family and Economic Issues</u>, 17(3/4), 365-392.

Cox, M. & Alm, R. (1994). These are the good old days: A report on the U.S. living standard. Dallas: Federal Reserve Bank of Dallas.

Hochschild, A. R. (1997). <u>The time bind: when work becomes home and home becomes work,</u> New York: Metropolitan Books.

Juhn, C., Murphy, K., & Pierce, B. (1993). Wage inequality and the rise in returns to skill. <u>Journal of Political Economy 101(3)</u>, 410-442.

McKenzie, R. B. (1997). Rx for economic pessimism: The CPI and the underestimation of income growth, St. Louis: Center for the Study of American Business, Policy Study Number 138.

Phillips, K. (1990). The politics of rich and poor. New York: Random House.

Rector, R., & Hirni, J. (1996). Marriage rate plummets, illegitimacy rate soars. <u>Intellectual Ammunition</u>, January/February: 12.

Rubin, R. M., & Riney, B. J. (1995). <u>Working wives and dual-earner families</u>. Westport, Connecticut: Praeger Publishing Company.

Sawhill, I., & Condon, M. (1992). Is U.S. income inequality really growing? <u>Policy Bites 13</u> (June) Washington, D.C.: The Urban Institute.

United States Bureau of Labor Statistics. (1996). Consumer expenditures, interview survey, 1960-61, 1972-73, 1984, 1994. Washington, D.C.

University of Michigan. (1995). Panel study of income dynamics, 1968-1992. Ann Arbor, MI.

Wessel, D., & Davis, B. (1995, March 29). In the middle of the middle: Two families stories. The Wall Street Journal, B1.

Endnotes

- 1. Professor, Department of Agricultural and Resource Economics.
- 2. The sociologist Hochschild (1997) posits a third possibility: that more parents work today because time at work is less stressful than time at home.
- 3. McKenzie finds the same results for families of all income levels.
- 4. These problems include infrequent adjustment of the "market basket" and outlets and imprecise adjustment for product quality changes.
- 5. The greatest differences between the CPI and the IPD-PCE occur for the 1960s and 1970s. The CPI shows a 400% increase between 1960 and 1994, compared to 353% for the IPD-PCE. Likewise, the CPI shows a 255% increase between 1972 and 1994, compared to 229% for the IPD-PCE.
- 6. Weighted sample sizes vary by cell and range from 7597 to 5,000,753. Trends in the real consumption of individual spending categories, like shelter, transportation, and food, were also developed but aren't presented here due to space limitations.