
Do Husbands and Wives Pool Their Resources?

Further Evidence

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ABSTRACT

This paper replicates results of an article showing that families with children increased expenditures on women's clothing (relative to men's) after implementation of a policy that shifted a child subsidy "payment" from the father to the mother. These results were interpreted as evidence that families do not pool their income but allocate consumption based on income source. However, the current paper also finds an increase in relative spending on women's clothing among childless couples, a sample the policy change did not impact. Alternative explanations are explored for observing these patterns, but none can rule out either bargaining or income pooling.

I. Introduction

The debate over whether families pool their resources when making consumption decisions or whether they bargain within the family to obtain the biggest piece of the consumption pie has a long history in the labor economics literature. An alternative to the original pooling model of Mincer (1962) and Kosters (1966) was developed in the 1970s and 1980s. This alternative argued that allocation of consumption goods and leisure has more to do with family members' relative economic power within the family than with the comparative advantage of members within the household (for example, see Ferber and Birnbaum 1977; Horney and McElroy 1988). This question of how families allocate resources is an important one for policy

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makers. If the source of income doesn't matter in the family's decision making, then policies can be targeted at any family member to achieve a desired outcome. If, on the other hand, income source does matter, the family will react differently to a particular policy, depending on which member the policy is targeted toward.

Lundberg, Pollak, and Wales (1997), hereafter referred to as LPW, made use of a unique policy change in the United Kingdom to explore the question of whether husbands and wives pool their income in making consumption decisions, or whether the source of the income (through the wife or through the husband) makes a difference in family resource allocation. Prior to 1977, the policy governing a child subsidy dictated the payment be made available to households with children through a tax allowance, as a reduction in taxable income (typically reflected as higher take-home pay to the father). This allowance program was phased out and replaced by 1979 with a nontaxable payment made directly to the mother. This policy change can be viewed as a "natural experiment" that LPW exploited to see whether consumption patterns changed as a result of this shift in who received this subsidy. The argument is that if husbands and wives pool their income, a change in the recipient of the subsidy (for example, from husband to wife) should not alter consumption patterns within the family pre- to postpolicy change.

LPW use the United Kingdom expenditure survey to examine expenditures on women's, men's, and children's clothing. They argue that wives have greater interest in children's and women's clothing than do husbands, so that if we see an increase after the policy change in children's and/or women's clothing expenditures (relative to men's) in households with children, then we can conclude that husbands and wives do not pool their income and the recipient does matter in determining consumption decisions within a family. In other words, the policy change has given wives more bargaining power through control of more resources, thus a more prominent role in deciding how those resources are allocated.

The study found that the ratio of children's to men's and the ratio of women's to men's clothing expenditures did significantly increase postpolicy change relative to before the change. The result was found controlling for income levels and family size. Consequently, LPW conclude that their results provide, "important new evidence against common preference models of family behavior and income pooling" (p. 479).

A potential drawback to the structure of LPW's experiment is that they do not test to see if there was a structural shift in expenditure patterns among families with no children as well as families with children. They state that childless couples are excluded because those families are expected to have expenditure patterns much different overall than families with children. It is true that the natural experiment that was performed necessitates comparing apples with apples. But the inclusion of a control group for whom one does not expect any impact of a policy change (while controlling for differences between the control and experimental groups) can be useful, if not essential, in verifying the interpretation of the results found.¹ Since the child subsidy policy in no way impacted the income stream or income source for families

1. An alternative (other than using childless couples as the control group) is to compare expenditures on children's clothing among families with children in a country that did not experience this child subsidy shift, yet was similar to Great Britain in other ways, such as the increase in labor force participation of women over this time period, for example.

without children, one should find, if LPW's interpretation of their results is correct, that there was no structural shift in expenditure patterns among families with no children.

This paper will begin by replicating the results found by LPW for expenditures on women's clothing; then it will demonstrate that a similar pattern is found among families that do not have any children. The paper then suggests alternative explanations for observing the rising relative expenditure on women's clothing. None of these alternatives, however, are found to rule out either bargaining or income pooling.

II. Data Details

The data set used for LPW's, and this, analysis is the U.K. Family Expenditure Survey (FES). All variables used in this analysis are defined as LPW defined their variables. For each year, the FES reports mean expenditures and incomes for families divided by income categories. The number of families in each cell also is reported. Each cell and its average characteristics comprise an observation. In all regressions and mean tabulations, each cell is appropriately weighted and is treated as a representative family within that cell. In addition, expenditures on clothing are deflated by the "clothing and footwear" retail price index, and total expenditures are deflated by the overall retail price index. Total clothing expenditure is used as a narrow measure of income and total expenditure (on all items) is used as a broad measure of income. While the broad income measure might best reflect a family's *total* disposable income, the narrow income measure might better capture that part of the disposable income allocated to clothing and be able to better isolate the distribution of that allocation across family members.

An additional consideration in collecting the data for childless couples is that starting in 1978 the FES disaggregated the data based on retirement status. For the analysis here, these retirement and nonretirement income categories were recombined and weighted means from these groups were used as the cell values. In addition, like LPW, all cell observations were excluded if the sampling error reported was 50 percent or more. Because childless couples rarely reported expenditures on children's clothing, this paper focuses only on the relative expenditure on women's (versus men's) clothing.

III. Replication and Further Analysis

This section will present tables generated to match the results presented in Table 6 and Table 7 of LPW; Table 1 of this paper contains these results for the 1973–76 and 1980–90 time period (the results for the other year splits were also consistent). The results are able to be replicated exactly.

The significant coefficients on the child dummies interacted with the "Late Period" dummy and the fact that the magnitude is greater for families with more children lead LPW to conclude that shifting income from the husband to the wife increases family consumption on those items of greater value to the wife: women's clothing. LPW also show that this increased expenditure is not sensitive to the definition of the Late Period, nor merely indicative of a trend.

Table 1*Ratio of Women's to Men's Clothing Expenditures; LPW Sample Replication*

Variable	1973-76 1980-90	
	Broad Income Measure	Narrow Income Measure
Two-child families	-0.350 (2.56) ^b	-0.347 (2.54) ^b
Three-child families	-0.406 (2.34) ^b	-0.403 (2.32) ^b
Late period × one-child (D_1)	0.027 (0.22)	0.020 (0.15)
Late period × two-child (D_2)	0.255 (2.41) ^b	0.244 (2.20) ^b
Late period × three-child (D_3)	0.454 (2.57) ^b	0.447 (2.48) ^b
Income/10	0.019 (0.93)	0.096 (0.69)
Intercept	1.59 (11.32) ^a	1.64 13.72) ^a
Observations	181	181

Notes: Figures in parentheses are *t*-values. "Observations" is the number of cell means used in the regressions. The results are essentially the same when Age of Head (see text) is included as a regressor.

a. significant at the 99 percent confidence level.

b. significant at the 95 percent confidence level.

A. Childless Couples

This section provides an analysis parallel to that performed by LPW. The sample contains only families without children. Therefore, the children-specific regressors contained in LPW's analysis are not relevant. However, a regressor indicating the age of the household head is included. Table 2 contains the means for the childless sample. The age of the household head ranged from 41 to 70 years old, and more money is generally spent on women's clothing than men's clothing, on average.² Similar to the means reported in LPW's Table 3, the ratio of women's to men's clothing expenditures increased significantly from before to after the policy change; this observation holds for both "young" and "old" childless families. Given the variation in age across families and particularly across childless families and families with children, inclusion of Age of Head is important to capture differences in expenditure patterns that are age-specific. Including Age of Head to LPW's regression essentially leaves the results presented in Table 1 unchanged. The average age of household heads in LPW's original data (they did not gather or report this variable) is 36.99 years, with a minimum age of 32 and a maximum age of 42. With only a slight overlap in age between

2. One referee pointed out that the subsidy may increase not only the power of women with children, but also women planning to have children. The implication is that the "cleanest" control group would be families beyond childbearing years. Given that the minimum age of the head in the childless sample is 41, it is likely the vast majority of these families are beyond childbearing considerations. In the end, if the subsidy did have the effect of transferring power to women, the impact will surely be the strongest among families with children.

Table 2

Family Expenditure Survey Data, Childless Couples Only: Descriptive Statistics for Cell Means

	Mean	Standard Deviation	Minimum	Maximum
Age of household head	55.70	187.59	41	70
Expenditures				
Women's clothing	1.76	2.50	0.32	7.24
Men's clothing	1.09	1.33	0.32	4.40
Total clothing and footwear	4.06	4.87	0.98	14.40
Total current consumption	42.59	36.50	18.07	106.29
Expenditure ratios, women's clothing/men's clothing			1973–76	1980–90
All families			1.43	1.59
Families age of head ≥ 65			1.19	1.35
Families age of head < 65			1.50	1.68
Number of cells (all families)			31	44

Notes: Means are weighted by the number of households in each cell. Expenditures are in pounds per week and are deflated by retail price index with January 1974 = 100. Means are weighted by the number of households in each cell. The average age of household head for families with children is 37, and ranges from a low of 32 to a high of 42 (age was not included in the original LPW data set).

the childless families and families with children, the importance of including a control for age below is clear.

Following LPW, Figure 1 presents the trends and period averages of the ratio of women's to men's clothing expenditure for all childless couples. With the exception of 1985, the ratio is higher in all postperiod years than in preperiod years.

Table 3 (Panels A and B) presents regression results analogous to those performed by LPW for both definitions of income. While these results suffer from limited sample sizes, they parallel those reported by LPW for couples with children. The significant coefficients on "Late Period" in the first column of both panels indicate that the ratio of women's to men's clothing increased significantly among childless couples, post policy change. We also see that the older the head, the less the family spends on women's clothing, relative to men's. The significance on the "Late Period" coefficient in the third column of both panels suggests that the relative expenditure on women's clothing rose again during the later part of the postpolicy time period. However, the insignificance of the coefficient on "Late Period" in the second column indicates the pre- to postpolicy change in relative expenditures on women's clothing was not merely an ongoing trend that started in the early period.³

3. The analysis was repeated excluding observations from 1990. The "Late Period" coefficient remained significant in the pre- to postpolicy regression (in the broad income model), and was insignificant in the postpolicy time period regression. The implication is that while relative expenditures on women's clothing may have increased again during the postpolicy period, it was only late in the period and not merely the continuation of a trend.

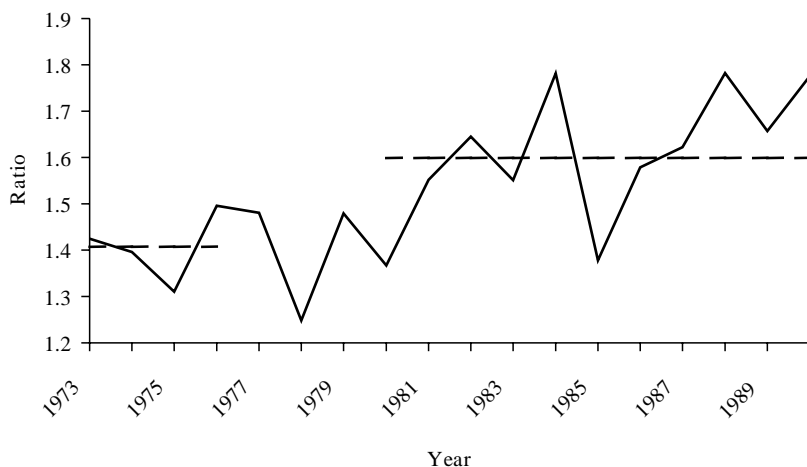


Figure 1

Ratio of Women's to Men's Clothing Expenditure, Childless Couples, 1973–90

Note: Each ratio is calculated from the weighted average of cell expenditure means across income categories. The straight lines are the prechange (1973–76) and postchange (1980–90) means of the data.

According to the interpretation of LPW, we should not have seen a significant increase in relative expenditure on women's clothing among childless couples since the policy change would not have affected the allocation of income between members in childless households. The similarity of results for childless couples and for those with children suggests that the change in child subsidy payment method was not necessarily the cause of the observed change in the clothing expenditure pattern. The next section investigates the question of whether the increase in relative expenditures on women's clothing was greater for families with children than for childless families.

B. All Families Combined

Table 4 presents results testing whether families with children increased relative expenditures on women's clothing more than families without children, using both income measures.⁴ The results are consistent using both income measures, although the regressors are slightly less significantly different from zero (except for Age of Head) when the narrow income measure is included, suggesting that the narrow measure may better capture resource allocation decisions that are more closely aligned with expenditures on clothing. The coefficient on Income/10 indicates that the more a family spends overall and the more a family spends on clothing, the greater

4. Only the results for the pre- to postpolicy regression are presented. The significance levels of the coefficient on "Late Period" in the other time period regressions mirror those for childless couples; the coefficient is insignificant for the 1973–76 to 1980–83 period comparison and marginally significant at the 90 percent level for the 1980–83 to 1987–90 period comparison. In addition, the coefficients on the interaction between "Late Period" and number of children are all insignificant in the regressions of shorter time periods.

Table 3*Ratio of Women's to Men's Clothing Expenditures, Childless Couples Only*

(A) Broad Income Measure

Variable	Sample Time Period		
	1973–76 1980–90	1973–76 1980–83	1980–83 1987–90
Late period	0.137 (2.03) ^b	0.108 (1.38)	0.188 (2.26) ^b
Age of head	-0.011 (1.70) ^c	-0.019 (2.11) ^b	-0.022 (2.49) ^b
Income/10	0.035 (1.08)	-0.009 (0.16)	-0.028 (0.66)
Intercept	1.885 (4.07) ^a	2.533 (3.54) ^a	2.848 (4.43) ^a
Adjusted R ²	0.31	0.28	0.40
Observations	75	48	32

(B) Narrow Income Measure

Variable	Sample Time Period		
	1973–76 1980–90	1973–76 1980–83	1980–83 1987–90
Late period	0.130 (1.81) ^c	0.100 (1.15)	0.186 (2.20) ^b
Age of head	-0.013 (2.44) ^b	-0.0168 (1.86) ^c	-0.020 (2.71) ^b
Income/10	0.193 (0.92)	0.085 (0.15)	-0.155 (0.57)
Intercept	2.077 (6.01) ^a	2.336 (3.57) ^a	2.710 (5.41) ^a
Adjusted R ²	0.31	0.28	0.39
Observations	75	48	32

Notes: Figures in parentheses are *t*-values. "Observations" is the number of cell means used in the regressions.

- a. significant at the 99 percent confidence level.
- b. significant at the 95 percent confidence level.
- c. significant at the 90 percent confidence level.

will be the expenditure on women's clothing relative to men's. The rest of the coefficient estimates are consistent across the two measures of income, as well: Families with older heads spend less on women's clothing relative to men's, the more children a family has the less it spends on women's clothing relative to men's (in other words, one-child families don't spend any more or less on women's clothing, relative to men's, than childless couples, but two- and three-child families spend significantly less on women's clothing, relative to men's, than do childless couples), and *all* families increased their relative expenditure on women's clothing postpolicy time period relative to the prepolicy time period.

Table 4*Ratio of Women's to Men's Clothing Expenditures, All Families*

Variable	1973–76		1980–90	
	Broad Income Measure		Narrow Income Measure	
One-child families	0.026	(0.19)	2.7×10^{-4}	(0.00)
Two-child families	-0.331	(2.67) ^b	-0.352	(2.86) ^a
Three-child families	-0.393	(2.44) ^b	-0.416	(2.6) ^b
Late period \times one-child	-0.115	(0.82)	-0.124	(0.89)
Late period \times two-child	0.111	(0.90)	0.094	(0.76)
Late period \times three-child	0.302	(1.64)	0.292	(1.57)
Late period	0.138	(2.00) ^b	0.130	(1.84) ^c
Age of head	-0.010	(2.69) ^a	-0.012	(3.24) ^a
Income/10	0.033	(2.12) ^b	0.192	(1.79) ^c
Intercept	1.879	(7.26) ^a	2.029	(8.92) ^a
Adjusted R ²	0.15		0.15	
Observations	256		256	

Notes: Figures in parentheses are *t*-values. "Observations" is the number of cell means used in the regressions.

a. significant at the 99 percent confidence level.

b. significant at the 95 percent confidence level.

c. significant at the 90 percent confidence level.

The notable result in Table 4 is that the relative expenditure on women's clothing did not increase significantly more for families with children than for families without children after the policy change. When the broad income measure is included, the coefficient on "Late Period X three-child" is *almost* significant; it is significantly different from zero at the 89 percent confidence level. The near-significance of the coefficient on "Late Period X three-child" may be an artifact of the possibility that the broad income measure does a poorer job of targeting income allocated to clothing expenditures; if the narrow income measure of income is more accurate, then the less-significant coefficient on "Late Period X three-child" in the regression that includes the narrow income measure is likely more accurate. It may also be the case that the amount paid to the mother per child doesn't fully take into account the economies of scale with children; the more children in the household, the more opportunities for hand-me-downs and other efficiencies to scale.⁵ The implication, then, might be that with three children there is enough money left over from the subsidy to be spent by the mother on her clothing. An alternative reason one might see a greater increase in

5. The current child allowance in the United Kingdom does recognize some economies to scale by providing a larger amount for the first child, then a fixed amount for each additional child. See Bradshaw and Finch (2002).

relative expenditures on women's clothing in three-child families (compared with all other structures) is that these families are more likely than the others to include a teenage girl. The presence of a teenage girl, in addition to the mother, increases the number of consumers of women's clothing in a family. If the relative expenditure increases for all families postpolicy, it will increase even more among families with more consumers of women's clothing.

So, while there is some evidence here that families with a larger number of children increased relative expenditures on women's clothing more than childless couples did, the indisputable evidence points to an across-the-board increase in women's clothing relative to men's within all family types (with and without children) postpolicy, relative to the prepolicy time period.⁶

IV. Alternative Explanations

The natural question that arises, after concluding that expenditures on women's clothing rose relative to men's over the 1973–90 time period for *all* families, not just those with children, is what explanation can be offered other than the shift in payment of the child subsidy? Furthermore, what implications do these alternative explanations have for the income pooling versus household bargaining models?

A. Other Legislative Policy Changes

One possibility is that other income, sales, or value added taxes or other policies changed the price of women's (and children's) clothing relative the price of men's. This explanation, if applicable to all families would not be able to distinguish between the two hypotheses, but at least provide an explanation that does not rule out the income pooling hypothesis. A fairly exhaustive search of other relevant tax law changes did not turn up any viable candidates, so other policy changes are not likely the reason for the observed change in relative clothing expenditures.

B. Gender Differences in Demand Elasticities

Figure 2 illustrates a tremendous drop in real clothing prices in Great Britain between 1973 and 1990. As can be seen in this figure, prices fell the most between the 1973–76 and 1980–90 time periods; those periods corresponding the early and late periods of focus in the above analysis. The smallest price change occurred between the 1980–83 and 1987–90 periods, also consistent with the evidence above of no (or smaller) later trend in relative expenditures.

If these price changes were distributed equally across men's and women's clothing (there is no information on women's and men's clothing prices separately), the relative increase in women's expenditure could occur as a result of women's demand for

6. Restricting the analysis to families whose head is less than 65 years of age (as suggested by one referee) results in nearly identical results, except the coefficient on "Late Period X three-child" becomes even less precise (and the entire fit of the model is less precise, given the fewer observations). Restricting the sample to include only childless families whose head is greater than or equal to 65 years old did not result in enough observations among childless couples to yield any sort of reliable results.

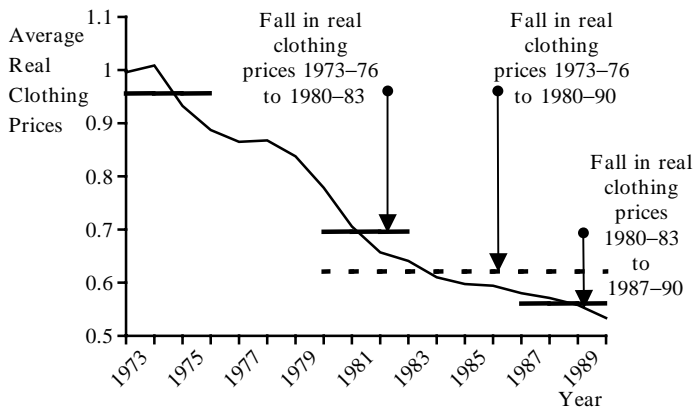


Figure 2

Real Clothing Prices, 1973-90

Note: The horizontal lines represent average real clothing prices for the time periods indicated. Calculated from the price data provided by LDW to the author.

clothing being more elastic than men's.⁷ This would offer an alternative explanation that is at least consistent with (not contradictory to) the pooling hypothesis for explaining the relative increase in women's expenditures. The only evidence found on relative clothing price elasticities, however, indicates that (in the United States) the price elasticity of demand for women's and children's clothing is *smaller* (-0.74) than the price elasticity of demand for men's and boy's clothing (-0.80) (see Kisung 1998). Differences in price elasticities of demand, then, also do not offer a viable alternative explanation for the relative increase in expenditure on women's clothing over this time period.

C. Labor Force Participation of Women

One potential explanation for rising expenditures on women's clothing that would be consistent with income source being important in household allocation of resources (consistent with the bargaining model) is the rising labor force participation of women.⁸ With increased labor market participation, women potentially enjoy more economic power and control of family resources; if household expenditures are based on relative economic power, an increase in economic power of women would lead to greater relative consumption of items that women value more—women's and children's clothing; both for families with and without children.

Figure 3 illustrates the labor force participation rates for men and women in Great Britain between 1971 and 1990. As can be seen in the figure, women increased their

7. Thanks to Robert Moore for suggesting this alternative explanation.

8. Thanks to Robert Pollak for suggesting this alternative explanation.

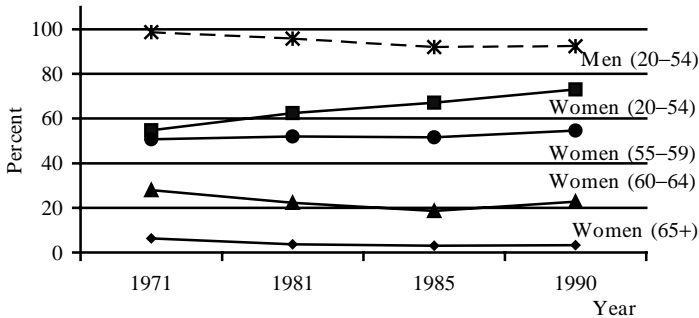


Figure 3

Labor Force Participation Rates, Men and Women, Various Years and Ages for the United Kingdom

Source: International Labour Organization online, <<http://laborsta.ilo.org/>>.

labor force participation relative to men over this time period.⁹ In addition, the participation rate increase seems to be limited to women under the age of 55 over the entire time period. The rising relative expenditures on women's clothing coinciding with this rise in female labor force participation would seem to provide support for the bargaining hypothesis.¹⁰

However, there is an alternative interpretation of the positive relationship between women's labor market participation rates and increased expenditure on women's and children's clothing that is consistent with the income pooling hypothesis. As women enter the labor market they will surely need to expand their wardrobes.¹¹ The greater relative expenditure, then, could be the result of the family deciding to use its joint resources to invest (through greater clothing expenditure and less time bargain hunting) in the new income-generating activity of a family member.

It has been well documented that as women devote more time to the labor market, the amount of time they spend in home production does not decline proportionately (for example, see Juster and Stafford 1991). In addition, the increase in men's home work does not increase to make up for the lost wife's production. If buying children's clothes is one of the "home production" activities that is performed disproportionately by women, her spending more time in the labor market means she has less time to

9. Kisung (1998) also finds (for the United States) that the income elasticity is greater for women's and children's clothing than for men's and boy's clothing, suggesting that the rising women/men expenditure ratio could merely be the result of rising family incomes with more women working. Recall, however, that the significant impact of the later time period on this expenditure ratio was found holding family income constant.

10. In addition, the greater increase in labor force participation of women between 1985-90 (5.9 percentage points) versus the increase between 1980-85 (4.7 percentage points) is consistent with the finding that most of the rise in women's/men's clothing expenditure ratio came in the late 1980s.

11. There is some evidence that women's wardrobes are more season-specific and turn over more frequently as a consequence of changing styles (Brink 2000; also see Rundles 2000). This suggests that working women will spend relatively more money on clothes than working men as they replace or add to their wardrobes at a more frequent rate.

allocate (and less incentive) for shopping for the best price on children's clothes (or her own), thus making the expenditure on children's (and women's) clothes rise as she spends more time in the labor market.¹² If men do much of their own shopping, women entering the labor market should not affect expenditures on men's clothing, thus the ratio of children's and women's clothing expenditure to men's clothing expenditure will rise.¹³

V. Conclusions

This paper explores further evidence in the debate on whether families pool their resources in making consumption decisions or base consumption decisions on the relative bargaining power of individual members. The paper first replicates the results presented by Lundberg, Pollak, and Wales (1997) (LPW) showing that families with children increased their expenditure on women's clothing (relative to men's) following the implementation of a policy in Great Britain that shifted a child subsidy "payment" from the father to the mother. LPW interpreted these results as an indication that families do not pool their income but, rather, allocate consumption based on income source.

The analysis of LPW, however, does not include a control group; that is, a set of observations for which the policy change should have no impact on consumption patterns. When the natural control group (childless couples) is analyzed, the same clothing expenditure pattern is found—when no income transfer between spouses is present. Although these results do not disprove that resources in a household are allocated based on a bargaining mechanism, they do cast doubt on the ability to use the findings of LPW as firm evidence *against* income pooling.

Alternative explanations for the increased expenditure on women's clothing relative to men's were explored. None of the suggested alternatives could rule out either bargaining or income pooling as possible models consistent with the observed changes in clothing expenditure patterns.

References

- Bradshaw, Jonathan, and Naomi Finch. 2002. "A Comparison of Child Benefit Packages in 22 Countries." *Department of Work and Pensions Research Report No. 174*, <<http://www.dwp.gov.uk/ask/ask5/rrep174.asp>>, accessed 16 March 2004.
- Brink, Becky. 2000. "Every Season Bring Evolution in Women's Fashion." *Wearables-Business.com*, 30 September, <http://wearablesbusiness.com/issue_20000930> accessed 12 March 2004.

12. In addition, probably less dramatic reasons that expenditures on children's clothing might increase as the wife enters the labor market could be that the wife spends less time sewing or that the children need more clothing, wearing clothes out more quickly when they are cared for outside the home.

13. Although I found no evidence for shopping habits in Great Britain in the 1970s, evidence from a recent survey indicates that from 70-79 percent of purchases of men's pants, shirts, outerwear, and tailored clothes are made by men. Between 31-45 percent of purchases of men's socks, pajamas, and underwear are made by women. See D'Innocenzio (2004). The implication is that men make a significant contribution to the purchasing activity of their own clothes.

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- D'Innocenzio, Anne. 2004. "Studies Look at Male Shopping Habits." *BeaufortGazette.com*, April 1, <<http://www.beaufortgazette.com/24hour/business/story/1257945p-8324177c.html>> accessed 15 April 2004.
- Ferber, Marianne, and Bonnie G. Birnbaum. 1977. "The 'New Home Economics': Retrospects and Prospects." *Journal of Consumer Research* 4(1):19-28.
- Horney, M.J. and M.B. McElroy. 1988. "The Household Allocation Problem: Empirical Results from a Bargaining Model." In *Research in Population Economics* Vol. 6. ed. T. P. Schultz, 185-208. Greenwich, Conn.: JAI Press.
- Juster, Thomas F., and Frank P. Stafford. 1991. "The Allocation of Time: Empirical Findings, Behavioral Models, and Problems of Measurement." *Journal of Economic Literature* 29(2):471-522.
- Kisung, Kim. 1998. *U.S. Aggregate Demand for Clothing and Shoes, 1929-1994: Effects of Changes in Price, Nondurables Expenditures, and Demographics*. Dissertation. University of Virginia.
- Kosters, Marvin. 1966. "Income and Substitution Effects in a Family Labor Supply Model." P-3339. Santa Monica, Calif.: Rand Corporation.
- Lundberg, Shelley, Robert Pollak, and Terence Wales. 1997. "Do Husbands and Wives Pool Their Resources? Evidence from the United Kingdom Child Benefit." *Journal of Human Resources* 32(3):463-79.
- Mincer, Jacob. 1962. "Labor Force Participation and Married Women." In *Aspects of Labor Economics*, ed. H. Gregg Lewis, 63-105. Princeton, N. J.: Princeton University Press.
- Rundles, Jeff. 2000. "Conservatively Speaking." *WearablesBusiness.com*, 30 September, <http://wearablesbusiness.com/issue_20000930> accessed 12 March 2004.