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What Do Male Nonworkers Do?
Evidence from the American Time Use Survey*

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Abstract

The nonwork rate of prime-age men has increased dramatically over the past 35 years. In 1967, only 2.2 percent of men spent an entire year without working. By 2003, that fraction had more than tripled. Researchers now have a pretty good understanding of the factors that have led to this increase, and how nonworking men support themselves. This paper takes advantage of the large sample in the new American Time Use Survey to examine how nonworking men spend their time. We compare nonworking men to both working men and nonworking women, with a particular focus on the extent to which they are substituting nonmarket work for market work. We find that very little of the time freed up by not working is spent doing household work, although the time spent doing household work depends on the reason for not working and the demographic and household characteristics of the nonworker. Compared with female nonworkers, male nonworkers spend less time doing household work, but the difference is considerably smaller after controlling for reasons and individual characteristics. Finally, we find weak evidence that the average amount of household work by nonworkers is greater in stronger labor markets, which implies that nonworkers have a relative advantage doing household work.

I. Introduction

Over the last 35 years, there has been a dramatic increase in the fraction of prime-age men who do not work for periods of a year or more. Between 1967 and 2004, the fraction of 25-54 year-old men that did not work at least one week during the year increased from 2.2 percent to 8.2 percent.[1]

Most of the research on male nonworkers has focused on explaining this trend, with much of this literature concentrating on the growth in the "Sick/Disabled" category. These studies have concluded that a major reason for the increase in this category in the 1970s and, to a lesser degree, in the 1990s is the increased availability of Social Security Disability Insurance and associated benefits.[2] Although most full-year nonworkers are "Sick/Disabled," a large and growing fraction is not. Since 1967 the fraction of men who did not work for reasons other than Sick/Disabled grew three times as fast as the Sick/Disabled category. These categories now comprise 42 percent of nonworkers, compared to 23 percent in 1967. Moreover, between 1990 and 2004, the fraction of men who reported Family Care more than tripled, and the fraction reporting Retired more than doubled. In line with this increase in withdrawal from the labor force of the non-disabled, studies by Juhn (1992) and Welch (1997) concluded that the declining wages of less-skilled men have also led to decreased male labor force participation in the 1980s.

Economists have long recognized that market work is not the only way to contribute to a household's well-being.[3] Home-produced goods are often close substitutes for market goods, with housework, meal preparation, and childcare being the most prominent examples.

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[1] Authors' tabulation of March CPS data.
[2] Parsons (1980), Autor and Duggan (2003), Bound and Waidmann (2002), and Sheu (2003).
[3] Reid (1934); Becker (1965).

Household work has traditionally been considered women's work. But the partial convergence of men's and women's wages over the past few decades[4] (and a possible weakening of gender stereotypes) would be expected to increase the number of households where men and not women specialize in household work.

If men who have withdrawn from the labor force are simply substituting non-market for market work, this may imply a relatively benign view of the decline in male labor force participation, at least among the non-disabled. If, on the other hand, men are increasing their hours of leisure or other non-productive activities, one might worry about the underutilization of human resources associated with low labor force participation. This paper uses data from the new American Time Use Survey (ATUS) to investigate how male non-workers spend their time, and how much of their time is devoted to household work.

We find that male non-workers spend only a little more time in doing household work than male workers, and that they spend much less time doing household work than female non-workers. The typical day of the male non-worker looks much like the typical non-working day of the male full-time worker. Much of the difference between non-working men and women stems from different living arrangements; male non-workers are less frequently in households with children. There is an identifiable group of men that appears to specialize in household production, but it is quite small.

[4] See Blau (1998), for example

II. Data

The ATUS sample is a stratified random sample that is drawn from households that have completed their participation in the Current Population Survey (CPS),[5] and its sample universe is the U.S. civilian non-institutional population. The ATUS interviews one person per household, and collects one diary per respondent. ATUS respondents sequentially describe what they did on their diary day (the day before the interview) beginning at 4:00am and continuing through 4:00am of the interview day. For each episode, ATUS collects a verbatim description of the activity, the location of the activity, and who was with the respondent. The activities are coded into over 400 detailed activity codes. The ATUS does not collect information about what else the respondent was doing at the time of each episode (secondary activities).

ATUS also contains labor force information that is comparable to the CPS, including employment status and usual hours worked per week. For the respondent's spouse or unmarried partner, the ATUS collects basic labor force information--employment status (employed or not employed) and total hours usually worked per week. ATUS does not collect any labor force information for other household members. (See Frazis and Stewart 2004 and Hamermesh, Frazis, and Stewart 2005 for more details about the survey.)

We pooled data from 2003 and 2004, and restricted the sample to men and women ages 25-54. Respondents were classified as workers or nonworkers based on the response to the ATUS labor force questions, although we dropped full-time students and the small fraction of nonworkers that reported working at a job on the diary day. Thus our sample consists of 8,393 men and 10,304 women, of which 881 men and 2,716 women were not employed.

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[5] The CPS interviews households for a total of eight months (in sample four months, out for eight months, then in for another four months).

We collapsed the ATUS activity codes into five main codes: Work-Related Activities, Unpaid Household Work, Leisure and Sports, Personal Care, and Other Activities. Work-Related Activities include working at a job, activities done for a job, and job search activities. Household Work includes cleaning, meal preparation, shopping, yard work, household maintenance and repairs (plus travel related to household work), and child care (as a primary activity). Leisure and Sports includes watching TV, attending performances and sporting events, playing sports and games, hobbies, relaxing, and socializing. Personal Care includes sleeping and grooming. Other Activities includes other travel, eating and drinking, phone calls, correspondence, and religious activities.

III. What Do Male Nonworkers Do?

Table 1 compares the time spent in selected activities by working and nonworking men and women, and shows how time use varies by reason for not working. For these estimates, we used the ATUS sample weights for 2003 and 2004 that were generated using 2004 procedures (TU04FWGT). For each estimating cell, we recalculated the weights to insure proper day-of-week representation. The reasons for not working are based on the responses to the labor force questions in the ATUS. The Unemployed category includes individuals who are classified as unemployed according to the official Bureau of Labor Statistics (BLS) definition, while the Disabled category includes individuals who say they did not work or have a job last week because they were disabled or unable to work. This way of identifying disability status is far

from ideal, but it is the best we can do with the data. The Other category includes all other reasons for not working.[6]

Nonworking men spend about 6 hours per day less in work-related activities compared with men who work full time. Of the time that is freed up by not working full time, nonworking men spend about one hour (17 percent) of that time doing household work, about 3.5 hours (58 percent) in leisure activities, and about 1.4 hours (23 percent) in personal care activities, although this allocation varies somewhat by reason for not working. The disabled spend none of their freed-up time doing household work, whereas the unemployed and those in the other category spend over one-quarter of that time doing household work. Men who work part time appear to fall between full-time workers and nonworkers, although they spend the same amount of time doing household work as full-time workers. Finally, the average day of a nonworker looks very much like the average nonwork day of a full-time worker, especially for nonworkers in the Other category.

Nonworking women spend more time--nearly twice as much--doing household work than nonworking men, with most of the difference being due to differences in the Other category. This translates into a larger fraction of freed-up time devoted to household work compared to men. Overall, nonworking women spend nearly half of the freed-up time doing household work, although there is greater variability by reason for not working compared to men. Like disabled men, disabled women spend almost none of the freed-up time doing household work, while the unemployed and those not working for other reasons spend 40 and 60 percent of the freed-up time doing household work.

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[6] This category includes people who say that they did not work or have a job last week because they were retired. Because this category is very small, it is included in the Other category.

To help quantify differences between working and nonworking men and women, we computed dissimilarity indexes for pairwise comparisons between these groups. This weighted absolute deviation index is given by the following formula:

$$(1) \qquad D = \sum_{i=1}^{12} \left\{ \left| \frac{a_i - b_i}{a_i + b_i} \right| \left(\frac{a_i + b_i}{\sum_{i=1}^{12} (a_i + b_i)} \right) \right\},$$

where a_i is the time spent in activity i by group *a* and b_i is the time spent in activity i by group *b*. We computed the index using 12 fairly aggregated activities. This index ranges between 0 and 1, with 0 indicating identical activity profiles and 1 indicating no activities in common, and is best described as a weighted average of the absolute percentage difference in time spent in all activities.[7] Alternatively, it is the fraction of time that must be reallocated to make the two groups identical.[8]

The values of the index in Table 2 confirm the observations above. On an average day, nonworking men look very different from men who work full time and somewhat less different from men who work part time. Nonwork days of both full-time and part-time workers look very similar to the average day of nonworkers, with the largest difference being 0.11 for the comparison between full-time workers and the disabled. The average days of nonworking men in the Unemployed and Other categories are virtually identical to nonwork days of men who work full time. A similar story can by told for women, although the differences between workers

[7] To put these numbers into perspective, if two groups are identical except for random noise, the activity profile index would take on a value of about 0.03 (See Stewart 2000).

and nonworkers on both average and nonwork days are smaller for most comparisons. Finally, the index values confirm that there is a moderate difference between nonworking men and women and that most of the difference is due to the Other category. Thus at least some of the overall difference is due to differences in the distributions of reasons for not working.

Table 3 compares the distributions of reasons for not working of men and women who did not work at all in 2003, using data from the 2004 March Income Supplement to the CPS. This sample differs from the ATUS sample in that it only includes long-term nonworkers,[9] but it has the advantage of more detailed reason-for-not-working categories. Most male nonworkers report being Disabled, whereas most female nonworkers report Family Care as the primary reason for not working. Because the Family Care category cannot be identified separately in ATUS, it falls into the Other category. Using the March CPS to construct a category that roughly corresponds to "Other" in the ATUS (by adding in the Family Care and Retired categories), we can see that the Family Care category accounts for 93 percent of this Other category for women, but only 39 percent for men. Thus we should not be too surprised at the large difference in the time spent doing household work, and in time use in general, between men and women in this category.

Restricting the sample in Table 3 to nonworkers masks some of the similarities between men and women, because a much larger fraction of women did not work in 2003. Differences in

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[8] We used this index, because it has an intuitive interpretation and is not too sensitive to the level of aggregation. See Stewart (2000) for a discussion of other activity profile indexes used in the time-use literature. This index is equivalent to the Duncan segregation index when $\sum_{i=1}^{k} a_i = \sum_{i=1}^{k} b_i$.

[9] The criteria for classifying nonworkers into reasons for not working also differs between the ATUS and the March Income Supplement. The March survey collects retrospective information on the main reason for not working for all nonworkers in the previous calendar year. In contrast, the ATUS gets disability status only if the respondent volunteers this information. The determination of unemployment status is more rigorous in ATUS, because it has the same requirements as the basic monthly CPS (actively searching for work and available to start immediately).

the two distributions are less pronounced when the sample includes workers, with the main difference being that a much larger fraction of women are engaged in family care, while a much larger fraction of men work in the market. However, if the Family Care category is grouped with workers, then the two distributions are remarkably similar. This suggests that nonworking men and women may be more similar than appears at first blush and that further investigation is warranted.

Related to the differences between men and women in reasons for not working are differences in living arrangements. Nonworking men are much less likely to be married or have children living in the household. And when children are present, they tend to be older. This is true overall and by reason for not working, with the exception of the Disabled category.

To examine the effect of these differences, we performed the following Oaxaca decomposition on the difference in the amount of time nonworking men and women spend doing household work:

$$
\begin{aligned}
\bar{y}_F - \bar{y}_M &= \bar{X}_F \beta_F - \bar{X}_M \beta_M \\
&= \bar{X}_M (\beta_M - \beta_F) + (\bar{X}_M - \bar{X}_F)\beta_F \\
&= \bar{X}_F (\beta_F - \beta_M) + (\bar{X}_F - \bar{X}_M)\beta_M ,
\end{aligned} \tag{2}
$$

where y is the time spent doing household work, X is a vector of covariates, and the M and F subscripts refer to male and female. The covariates X include dummies for living arrangements--with spouse (or unmarried partner) and household children, with spouse and no children, with children but no spouse, and with other adults (no children or spouse), with alone being the excluded category. These dummies are interacted with dummies for unemployed and disabled, with Other Nonworker excluded. The vector X also includes dummies for youngest child less

than 6, youngest child 6 to 12, and youngest child 13 to 17, and variables for number of children in these age categories.

The results in Table 4 show that a large fraction of the difference in the time spent doing household work is due differences in the mean values of the covariates in *X*. Using the decomposition in the second line of (2) (men's means for X) indicates that the fraction of the difference accounted for by differences in coefficients is 37 percent, with the remaining 63 percent being accounted for by differences in mean values of X. Using women's means for X, the fraction accounted for by differences in coefficients is 48 percent. Regardless of which set of estimates is used, it is clear that most of the difference between men and women in the time spent doing household work is due to differences in reasons for not working and household composition. But a substantial portion of the difference is still unexplained.

Given that most of the difference between men and women in the time spent doing household work can be explained by differences in household composition, we now focus on one living arrangement that is of particular interest: that of one-earner couples. The first two columns of Table 5 show the difference between men and women in the time spent in selected activities. Nonworking men spend more than an hour and a half less than nonworking women doing household work. Working men spend about one and a quarter hours per day less doing household work, but they spend just over an hour per day more in market work. Thus total work time is about the same for working men and women. Overall, one-earner couples with a male nonworker spend a little over an hour per day less in work activities (market and nonmarket combined). They spend more time in leisure and personal care activities; however, it is the nonworking man who receives this added time. The dissimilarity index indicates that the difference between these types of couples is in the small-to-moderate range. Adding controls for

the individual's demographic characteristics, reason for not working, spouse's education, and number and ages of household children makes the male and female nonworker couples look only slightly more similar. This is the net effect of an increase in similarity for nonworkers and a slight decrease in similarity for workers. The main effect of the controls is to decrease, by about half, the difference in time that nonworking men and women spend doing household work, with nearly all of the decrease being due to child care. Interestingly, after controlling for demographic characteristics and children, it is the male nonworker couple that spends more time doing household work, again with the difference being due to the difference in child care.

In Table 6, we further refine the comparison by focusing on nonworkers who are likely to be the care-givers of the family. These are married nonworkers who were not unemployed or disabled, whose spouses work full time, who have children under 18 living in the household, and who were not short-term nonworkers ("short-term" nonworkers are nonworkers who were employed at the time of their final CPS interview, 2-4 months prior to the ATUS interview). There are very small differences between nonworking men and women. They spend about the same amount of time doing household work, but the men spent more time caring for children and less time in meal preparation. Surprisingly, it is the workers who differ the most. Men spend more time in paid work activities, while women spend more time doing household work, much of it in child care. Thus, comparing stay-at-home dad couples with stay-at-home mom couples, the former spends less time in paid work, more time doing household work--all of if in child care--and less time in leisure. The dissimilarity index confirm that although the nonworkers are very similar, the workers and the couple as a whole are moderately different.

Labor Market Conditions and Household Production

In this section , we examine how changes in labor market conditions affect the composition of nonworking men, with the goal of determining whether nonworking men have a relative advantage in nonmarket work or whether they are unproductive in both sectors and nonwork is simply the default state. We take as our starting point the two-sector model of Roy (1951), and formalize it using a framework based on Maddala (1983, p. 257).

Assume men have a choice between working in the market sector or the nonmarket sector. For simplicity, we assume that men who choose the market sector work full time and do not do any household work. Let the random variable y_1 denote the value of non-market work and y_2 denote the value of market work. Let $y_1 = m_1 + u_1$ and $y_2 = m_2 + u_2$ where m_1 and m_2 are constants that represent mean productivity in each sector and $u_1, u_2 \sim N(\mathbf{0}, \begin{bmatrix} \sigma_1^2 & \sigma_{12} \\ \sigma_{12} & \sigma_2^2 \end{bmatrix})$. A given man chooses the non-market sector if:

(3) $\quad y_1 > y_2 \;\rightarrow\; m_1 - m_2 > u_2 - u_1 \;\rightarrow\; Z > u,$

where $Z \equiv \frac{m_1 - m_2}{\sigma}$, $u \equiv \frac{u_2 - u_1}{\sigma}$, and $\sigma^2 \equiv Var(u_1 - u_2)$. Thus the mean value of productivity in the non-market sector is:

(4) $\quad M_1 \equiv E(y_1 \mid y_1 > y_2) = E(y_1 \mid u < Z) = m_1 - \sigma_{1u} \frac{\phi(Z)}{\Phi(Z)},$

where $\phi(\cdot), \Phi(\cdot)$ are the pdf and cdf of the standard normal distribution and $\sigma_{1u} = \mathrm{Cov}(u_1, u)$. An increase in the market wage can be represented as an increase in m_2, which is simply an upward

shift in the distribution of market productivity. Thus we are interested in the sign of $\frac{\partial M_1}{\partial m_2}$.

Differentiating (4), it is straightforward to show that

$$\frac{\partial M_1}{\partial m_2} = -\sigma_{1u}(Z\Phi(Z) + \phi(Z))\frac{\phi(Z)}{\sigma\Phi(Z)^2}$$

and $Z\Phi(Z) + \phi(Z) > 0$, so that $\frac{\partial M_1}{\partial m_2}$ has the opposite sign as σ_{1u}. From the definition of u, σ_{1u} $= \sigma_{12} - \sigma^2_1$, so $\frac{\partial M_1}{\partial m_2}$ will be positive if $\sigma_{12} < \sigma^2_1$. This is true if $\sigma_{12} < 0$ or if $\sigma_{12} > 0$ and is sufficiently small. Thus if market and non-market productivity are negatively correlated or independent of each other, an increase in the wage will draw individuals who are the most productive in market work and the least productive in nonmarket work into the market sector and will result in higher average productivity in the nonmarket sector. If the covariance between market and nonmarket productivity is positive and sufficiently large, increases in wages will imply decreases in mean non-market productivity as men with low market wages will also tend to have low non-market production.[10]

Given that Z is inversely related to market wages, it can be shown that the effect of mean wages m_2 on nonmarket productivity M_1 is greatest when Z is small and wages are high. This makes intuitive sense, because when wages are high a smaller fraction of the population does not work and men on the margin of working are thus a greater fraction of the pool of nonworkers.

Because we do not observe nonmarket productivity, our maintained assumption throughout this analysis is that higher productivity in household production translates into more

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[10] A necessary, though not sufficient, condition for $\sigma_{12} > \sigma^2_1$ is $\sigma^2_2 > \sigma^2_1$, (to satisfy the Cauchy-Schwartz inequality). This condition is likely to hold since the variance of market productivity is likely greater than the variance of non-market productivity.

time spent doing household work. We appeal to the household production model from Gronau (1986) to predict the relationship between productivity and time spent doing household work. He notes that higher productivity increases the time spent doing household work if the household production function takes the form: $\alpha f(H)$, where α is the productivity coefficient, H is time spent doing household work, and $f(\cdot)$ is increasing and concave. If the household production function is given by $f(\alpha H)$, the relationship between productivity and time spent doing household work is indeterminate. However, it can be shown that time spent doing household work increases with productivity if the elasticity of the marginal product of the household production with respect to quality adjusted labor (αH) is greater than -1 (i.e., that it is inelastic).[11] It seems likely that marginal product does not vary much with labor input, so our assumption seems plausible.

While it is desirable to use wages as a measure of labor demand (and we will investigate this in future work), the relative desirability of market work may be influenced by interarea differences in the cost of living that would be difficult to correct for. Instead, we use the annual employment/population ratio (E/P), which we view as a summary measure of the relative attractiveness of market work, for 25-54 year olds for each state as our measure of labor market conditions.[12] (We use the male ratio in our men's non-market work regressions and the female ratio for women's.)

Results for the E/P ratio are shown in Table 7. As the effect of differing economic conditions would be expected to come partly or wholly through differences in the demographic composition of non-workers, we run regressions with and without controls for living

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[11] Both of these results require the additional assumption that the utility function be separable in the disutility of time spent doing household work.

[12] State-level employment-population ratios are computed by the Local Area Unemployment Statistics program for 10-year age groups. We average the rates for 25-34, 35-44, and 45-54 year olds using the relative national proportions of these age groups as weights.

arrangements. As above, we reweight so that each living-arrangement cell has weekdays comprising 5/7 of weighted total observations and weekends 2/7. Column (1) shows the coefficients on E/P ratio for non-workers as a whole in a regression without other covariates. The estimated effect of E/P on minutes per day in non-market work is small and insignificant for both men and women.

We would expect the results to be stronger (at least in terms of point estimates) when restricting the sample to those who are not-in-the-labor-force and not disabled, because these nonworkers might be more responsive to economic incentives given that their nonwork status was not the result of a sudden exogenous shock. Column (2) confirms this expectation, at least for men--a one percentage point increase in the male E/P ratio is associated with over one-quarter hour per day increase in nonmarket work. To put this into context, the standard deviation of the male E/P in our sample is 2.3 percentage points, implying that a one standard deviation increase in the E/P ratio is associated with more than one-half hour per day more nonmarket work. However, this effect is imprecisely estimated, and is significant only at the .071 level.

To some extent this may be due to the influence of economic conditions on the distribution of living arrangements among non-workers. For example, favorable economic conditions may disproportionately draw persons living in households without children into the labor force. Column (3) shows the coefficient on E/P in a regression with dummies for living arrangements added.[13] The coefficient declines relative to column (3) for men but increases slightly for women.

Our main interest is the specification in column (2), without other covariates. We can improve the precision of the estimate somewhat by incorporating data from the CPS. Let b_1

denote the coefficient on E/P in column (2), and let β_1 denote the coefficient on E/P in column (3), with β_2 denoting the vector of coefficients on the living arrangement dummies. Note that from the familiar formula for the effect of omitted variables (Greene 2000, p. 334, for example), $b_1 = \beta_1 + b_{12}\beta_2$, where b_{12} denotes a conformable vector of coefficients from regressions of the living arrangement dummies on E/P. While β_1 and β_2 must come from regressions using time-use data, b_{12} does not involve time-use and thus can be estimated from another data source with a larger sample.

The estimates in column (4) are estimates of b_1, the total effect of E/P, using an estimate of b_{12} from the 2003-2004 CPS instead of the ATUS. In accordance with Moulton (1990), we cluster observations by state in calculating standard errors, so that the gains in precision are smaller than might be guessed from the relative sample sizes of CPS and ATUS. These estimates suggest that the effect of E/P that operates through family structure is small, with little difference between the estimate in columns (3) and (4) for men and a wrong-signed difference for women (in the sense that the coefficient after controlling for living arrangements is larger). While neither coefficient is significant at conventional levels, their joint *p* value of .066 suggests that there is at least weak evidence in favor of a positive relationship between labor market conditions and non-market work of non-workers.

IV. Summary and Conclusion

As noted in the introduction, there has been much research examining the extent of and reasons for the decline in male labor-force participation over the past few decades. A recent

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[13] For this regression we class unmarried partners as other adults in the household, as information on unmarried partners in not available for all household members in CPS; see below.

study by Stewart (2005) examined their living arrangements, incomes, and who supports them. Our look at how male nonworkers spend their time is the final piece of the puzzle. Until now, we had no knowledge of the extent to which nonworking men substitute nonmarket work for market work.

Our initial look at the data revealed that nonworking men spend very little time doing household work, and that most of the time freed up by not working full time is spent in leisure activities and personal care. In contrast, nonworking women spend over half of this freed-up time doing household work.

Some of the overall difference between nonworking men and women is due to differences in reasons for not working. Men and women in the disabled and unemployed categories look fairly similar to each other, but there are large differences in the Other category that are mainly due to large differences in the composition of this group. Using data from the CPS, we estimate that vast majority of women in this category are providing care to family members, whereas less than half of men in this category do so. This difference reflects the facts that nonworking men are less likely to have children living in the household and that when children are present, they are older. Oaxaca decompositions indicate that differences in household composition (mainly the presence and ages of children) and reasons for not working can account for between one-half and nearly two-thirds of the difference between men and women in the time spent doing household work.

Focusing on one-earner families, there are interesting similarities between male nonworker and female nonworker couples. As before, nonworking men spend less time doing household work than nonworking women. However, after controlling for demographic and household characteristics, the difference falls by half and there is only a small difference

between men and women in the amount of time caring for children. This combined with the greater time caring for children by working women compared with working men means that parents of male-nonworker couples spend more time caring for children than parents of female-nonworker couples.

Our analysis indicates that for at least some non-disabled nonworkers, the main reason for not working is higher productivity in the nonmarket sector. This is encouraging given that the most rapid growth in male nonworkers has been in categories other than disabled. Still, most nonworking men--including the non-disabled--live in arrangements (households without children) where the demand for household work is low, and one has to wonder why these men do not work. As shown by Stewart (2005), their non-labor income and their overall household income is usually quite low, so the overall picture is one of both low money income and low household production.

Our last section tentatively suggests that nonworkers in states with better employment opportunities have higher average levels of non-market work. This in turn suggests that increases in employment would have the benefit that the remaining non-workers would be those best suited to non-market work, subject to caveats regarding low precision and problems with extrapolating from cross-sectional data. As ATUS data accumulate over future years, more research on the relationship between labor market conditions and non-market work may be fruitful.

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Table 1: Comparison of time spent in various activities by working and nonworking men and women (hours per day)

	Nonworkers				Workers			
					Average Day		Average Nonwork Day	
	Total	Disabled	Unemployed	Other	Full Time	Part Time	Full Time	Part Time
Men								
Work-Related Activities	0.25	0.01	0.69	0.04	6.28	4.39	0.04	0.31
Education and Training	0.14	0.11	0.10	0.30	0.04	0.15	0.06	0.19
Unpaid Household Work	3.33	2.45	4.00	3.93	2.33	2.32	4.37	2.98
Housework	0.46	0.42	0.49	0.55	0.21	0.32	0.51	0.72
Meal Preparation	0.47	0.40	0.52	0.54	0.24	0.27	0.41	0.28
Lawn/Garden Care	0.26	0.14	0.37	0.33	0.22	0.19	0.44	0.20
Childcare (as primary activity)	0.46	0.31	0.55	0.56	0.39	0.49	0.56	0.46
Unpaid Household Work (including secondary child care)	4.71	3.62	5.58	5.31	3.74	3.84	6.56	4.61
Leisure and Recreation	7.71	8.95	6.73	6.85	4.20	5.33	6.96	7.03
Personal Care	10.03	10.35	9.51	10.16	8.65	9.49	10.01	10.74
Number of Observations	881	356	312	213	7,159	353	2,646	145
Women								
Work-Related Activities	0.08	0.00	0.36	0.02	5.67	3.32	0.01	0.03
Education and Training	0.10	0.06	0.13	0.10	0.08	0.08	0.12	0.12
Unpaid Household Work	6.25	3.77	5.58	7.12	3.37	4.98	5.75	6.71
Housework	1.53	1.02	1.51	1.67	0.74	1.06	1.51	1.44
Meal Preparation	1.21	0.74	1.17	1.36	0.62	0.87	0.88	1.12
Lawn/Garden Care	0.17	0.11	0.12	0.21	0.10	0.12	0.25	0.15
Childcare (as primary activity)	1.56	0.58	1.07	1.96	0.53	1.23	0.69	1.78
Unpaid Household Work (including secondary child care)	9.03	5.00	8.21	10.37	4.63	7.31	7.53	9.68
Leisure and Recreation	5.26	6.78	5.76	4.72	3.45	3.92	5.25	4.69
Personal Care	9.81	11.01	9.61	9.52	9.08	9.21	10.30	9.74
Number of Observations	2,716	493	450	1,773	5,762	1,826	2,374	915

Table 2: Dissimilarity index comparisons of working and nonworking men

	Nonworkers		Workers				Women
			Average Day		Average Nonwork Day		
	Unemployed	Other	Full Time	Part Time	Full Time	Part Time	(Same Category)
Men							
All nonworkers	--	--	0.274	0.187	0.052	0.051	0.126
Disabled	0.134	0.101	0.304	0.218	0.106	0.085	0.100
Unemployed	--	0.053	0.245	0.165	0.055	0.077	0.076
Other nonworkers	--	--	0.279	0.198	0.025	0.056	0.140
Employed full time							
Average day	--	--	--	0.098	--	--	0.068
Average nonwork day	--	--	--	--	--	0.065	0.080
Women							
All nonworkers	--	--	0.250	0.148	0.051	0.036	--
Disabled	0.103	0.156	0.261	0.207	0.100	0.146	--
Unemployed	--	0.076	0.236	0.146	0.061	0.069	--
Other nonworkers	--	--	0.252	0.149	0.085	0.027	--
Employed full time							
Average day	--	--	--	0.103	--	--	--
Average nonwork day	--	--	--	--	--	0.063	--

Table 3: Distribition of Reasons for Not Working by Sex

	Nonworkers		All Men and Women	
	Men	Women	Men	Women
Worked at job in 2003	--	--	92.37	78.61
Did not work at job in 2003				
Family care	10.74	69.48	0.82	14.81
Disabled	58.69	21.87	4.35	4.46
Unemployed	13.44	3.31	1.04	0.76
Retired	9.35	3.92	0.73	0.95
Other	7.78	1.42	0.69	0.41
	100.00	100.00	100.00	100.00

Table 4: Oaxaca Decomposition of Time Spent Doing Household Work

		Predicted time using…		
	Actual	Men's Coefficients	Women's Coefficients	Percent Due to Difference in Cofficients
Men	3.34	3.34	4.41	37.0%
Women	6.24	4.83	6.24	48.4%

Table 5: Comparison of One-Earner Couples with Male and Female Nonworkers

	No Controls			With Controls		
	Difference Between Men and Women in One-Earner Couples (Men minus Women)		Difference in Total Time - Male Nonworker Couple minus Female Nonworker Couple	Difference Between Men and Women in One-Earner Couples (Men minus Women)		Difference in Total Time - Male Nonworker Couple minus Female Nonworker Couple
	Nonworkers	Workers		Nonworkers	Workers	
Work-Related Activities	0.38	1.08	-0.70	0.22	0.97	-0.75
Unpaid Household Work	-1.67	-1.22	-0.45	-0.85	-1.40	0.55
Housework	-1.00	-0.63	-0.37	-0.92	-0.62	-0.30
Meal Preparation	-0.72	-0.48	-0.23	-0.53	-0.48	-0.05
Lawn/Garden Care	0.15	0.13	0.02	0.17	0.17	0.00
Childcare (as primary activity)	-0.80	-0.32	-0.48	-0.22	-0.55	0.33
Leisure and Recreation	1.37	0.27	1.10	0.93	0.50	0.43
Personal Care	0.05	-0.50	0.55	-0.07	-0.48	0.42
Dissimilarity Index	0.091	0.081	0.095	0.068	0.088	0.082
Number of Observations						
Men	179	1,694		178	1,694	
Women	1,603	283		1,586	283	

Table 6: Comparison of One-Earner Couples with Children, One Full-time Worker, and Long-term Nonworker

	Difference Between Men and Women in One-Earner Couples (Men minus Women)		Difference in Total Time - Male Nonworker Couple minus Female Nonworker Couple
	Nonworkers	Workers	
Work-Related Activities	0.00	1.67	-1.67
Unpaid Household Work	0.18	-2.66	2.84
Housework	0.12	-0.58	0.70
Meal Preparation	-0.60	-0.45	-0.15
Lawn/Garden Care	-0.12	0.05	-0.17
Childcare (as primary activity)	0.78	-1.84	2.62
Leisure and Recreation	0.54	0.75	-0.21
Personal Care	0.04	-0.18	0.22
Dissimilarity Index	0.066	0.113	0.125
Number of Observations			
Men	28	1,059	
Women	1,049	45	

Table 7: Effect of Labor Market Conditions on Time Spent Doing Household Work

	NILF & Unemployed (including disabled)	NILF (excluding disabled)		
	(1)	(2)	(3)	(4)
	No Covariates	No Covariates	Living Arrangement Covariates	Total Effect, Auxiliary Regression from CPS
Men				
Effect of a 1 percentage point change in E/P ratio on time spent in household work	3.3 (3.5)	17.0* (9.2)	11.0 (8.0)	11.7 (7.9)
Women				
Effect of a 1 percentage point change in E/P ratio on time spent in household work	-0.8 (2.7)	1.1 (2.6)	3.1* (1.8)	1.9 (2.0)
P-value for F-test for E/P variable, both sexes	{0.602}	{0.166}	{0.363}	{0.066}

Note: Standard errors are in parentheses and p-values are in brackets.
* p < .10 (two-tail test)