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# The Time Use of Nonworking Men

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## 5

# The Time Use of Nonworking Men

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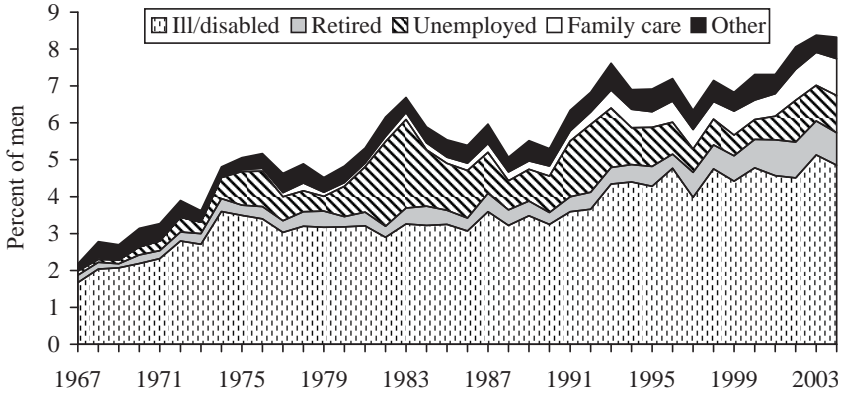
*U.S. Bureau of Labor Statistics*

Since the late 1960s, the fraction of prime-aged men who do not work for a period of one year or more has nearly quadrupled, increasing from 2.2 percent in 1967 to 8.2 percent in 2004.<sup>1</sup> Figure 5.1 illustrates this trend along with trends in the reasons for not working. Although most nonworking men are sick or disabled, a large and growing fraction are not. Most noticeable about this graph is the large increase in the Family Care and Retired categories. The Sick/Disabled category has increased as well, but the increase has been disproportionately larger in the other categories so that the percentage of nonworkers in this category has fallen from 77 percent to 58 percent.

Much of the past literature has focused on the reasons for the increase in the nonwork rate, with particular attention being paid to those who did not work because they were sick or disabled. The consensus is that supply factors, especially the liberalization of federal disability insurance regulations, contributed to the increase in the 1970s, while demand factors, mainly the relative decline in the demand for less-skilled workers, contributed to the increase in the 1980s.

Less attention has been paid to how these men spend their time and the related topic of how they support themselves. The time use of nonworking men is of interest because, from a resource utilization perspective, policy implications depend on the extent to which these men are substituting nonmarket work for market work. Nonworkers' access to income is of interest to policymakers who wish to assess the adequacy of income from government programs combined with other sources of income, including income from family members. For the present analysis, we are interested in access to income because it affects how nonworking men spend their time.

**Figure 5.1 Trends in the Nonwork Rate of 25- to 54-Year-Old Men by Reason for Not Working**



My analysis of nonworkers' time use will focus mainly on the division of time between leisure and household production activities, and how their time use differs from that of men who work.<sup>2</sup> Household production models, such as those in Becker (1965) and Gronau (1986), provide a theoretical framework for predicting how the time use of working and nonworking men differ and how other factors affect time use. Below, I briefly highlight the basic results from the Gronau model. A more rigorous discussion can be found in Appendix 5A.

The difference in workers' and nonworkers' time allocation is the sum of a substitution effect and an income effect. Because they do not forgo earnings when they spend time engaging in household production activities, nonworkers have a lower opportunity cost of time. This implies that they will consume fewer market goods and more home-produced goods (the substitution effect). Nonworkers also face a smaller budget set (have a smaller total income), which implies that they will spend less time in leisure activities (since leisure is a normal good) and more time doing household work.<sup>3</sup> Thus, both the income and substitution effects imply that nonworkers will spend more time doing household work than workers. In contrast, the difference in time spent on leisure activities is ambiguous. As with household work, a lower opportunity cost of time implies that nonworkers will spend more time in leisure activities. But, as noted above, nonworkers' lower incomes im-

ply that they will spend less time in leisure activities. Thus, nonworkers could spend either more or less time in leisure activities depending on the relative magnitude of each effect.

There are other factors that could affect the comparison of workers' and nonworkers' time use. The discussion above assumes that workers and nonworkers have the same preferences and are equally productive at nonmarket work. However, it is possible that nonworkers have a stronger preference for leisure or nonmarket work or that they are more productive in nonmarket work. It can be shown that, under reasonable assumptions, individuals who are more productive in household production activities will spend more time in these activities. Thus, we would expect disabled nonworkers, who are likely less productive in household production, to spend less time doing household work. In contrast, the presence of children tends to increase the demand for household work. The productivity of time spent doing household work may also be higher because it is possible to look after children at the same time. Differences in the preference for leisure matter because those with a stronger preference will spend more time in leisure and less time in household production activities. Finally, greater amounts of unearned income or income from other family members will expand the budget set and tend to decrease the amount of time spent in household production activities and increase the time spent in leisure activities.

The outline for the rest of the chapter is as follows. I begin by updating what we already know about how nonworking men support themselves. Then I use data from the American Time Use Survey (ATUS) to examine how prime-age nonworking men spend their time and compare them to prime-age workers and older nonworkers.

## **SOURCES OF SUPPORT**

Stewart (2006b) examines how prime-aged (25–54 years old) nonworking men supported themselves in the 1990s. In this section I update that analysis to cover the 2003–2004 period, which roughly coincides with the period covered by the ATUS data, using data from the 2004 and 2005 March Current Population Survey (CPS) files.<sup>4</sup> As in Stewart

(2006b), the focus of this section is on men who did not work at all during the calendar year.<sup>5</sup>

### **Sources of Income**

Table 5.1 shows the percentage of nonworking men that had any unearned income and the percentage with each type of income by reason for not working. Most nonworkers (about 64 percent) had at least one source of unearned income, but there is considerable variation by reason for not working. Nonworkers in the Sick/Disabled or Retired categories, who comprise more than two-thirds of nonworkers, were by far the most likely to have unearned income. The percentages of nonworkers receiving income from each source are consistent with their reasons for not working. The most common sources of income for sick/disabled nonworkers were Social Security, disability benefits, and asset income, while asset and retirement income were the most common sources for retired nonworkers. The small fraction of retired nonworkers who received Social Security is due to the fact that they were too young for old-age benefits and were likely receiving Social Security Disability Insurance (SSDI) or Supplemental Security Income (SSI) payments. Unemployment benefits and asset income were the most common sources for those who were unable to find work, but relatively few received income from either of these sources. In the Family Care category, asset income was the most common source.

The amount of unearned income received (conditional on receiving any income) by reason for not working is shown in the top panel of Table 5.2, while the percentage of income from each source is shown in the bottom panel. The income amounts are before taxes and are deflated to 2004 dollars using the consumer price index. Conditional on having any unearned income, the average amount was \$13,486, most of which came from Social Security and disability benefits.

Both average income and the percentage from each source vary considerably by reason for not working. Average income was highest for retired nonworkers, with about half coming from retirement sources (such as pensions) and another third coming from assets and Social Security. Sick/Disabled nonworkers' income was about the same as the overall average, although a much higher fraction—more than four-

**Table 5.1 Percent of 25- to 54-Year-Old Male Nonworkers with Income from Various Sources, 2003–2004 Average**

	All male nonworkers	Sick/disabled	Family care	Retired	Unable to find work	Other reasons
Percent of nonworking men	100.0	59.3	11.0	10.5	12.0	7.2
Percent of nonworking men with any unearned income	63.6	78.3	32.3	73.0	33.6	26.2
Percent of nonworking men with income from						
Assets	17.5	13.5	22.5	39.8	14.5	16.1
Disability sources	9.4	14.8	0.0	4.3	0.4	1.2
Social Security	39.6	60.4	3.3	29.0	2.4	1.9
Retirement plans	5.5	2.2	1.1	36.0	2.0	0.8
Unemployment compensation	4.5	2.8	4.3	0.6	16.8	4.6
Other sources	9.1	10.7	4.9	9.4	6.9	5.1
Observations	5,746	3,524	606	578	657	381

NOTE: The sample is from the March CPS and is restricted to civilian, noninstitutional men who did not work during the previous year. The top row shows the percent of nonworking men who report each reason for not working. The second row shows the percent of nonworking men who have income from at least one source. The final rows show the percent of nonworking men who have income from each of the sources listed. These percentages do not add up to 100, because some nonworkers do not receive any income while others receive income from more than one source.

**Table 5.2 Income of 25- to 54-Year-Old Male Nonworkers and Income of Other Adult Family Members Living in the Household, by Reason for Not Working, 2003–2004 Average**

	All male nonworkers	Sick/disabled	Family care	Retired	Unable to find work	Other reasons
Percent of nonworking men with any unearned income	63.6	78.3	32.3	73.0	33.6	26.2
Mean unearned income (conditional on receipt) (\$2004)	13,486	13,081	7,068	22,854	8,893	7,471
Percent of mean income (conditional on receipt) from						
Asset income	8.7	3.5	53.2	16.9	14.1	36.5
Disability income	17.9	23.6	0.0	4.4	4.1	8.0
Social Security income	46.4	58.4	9.8	21.4	4.6	10.7
Retirement income	12.7	2.5	11.8	48.4	15.1	5.4
Unemployment compensation	4.5	2.4	16.0	0.3	46.0	23.9
Other income	9.7	9.5	9.2	8.6	16.0	15.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percent of nonworking men living with other adult family members that have income (earned or unearned)	61.6	59.1	70.3	66.3	66.5	53.4
Amount per other adult (conditional on receipt) (\$2004)	21,647	18,756	35,506	23,870	19,853	19,757

NOTE: The sample is from the March CPS and is restricted to civilian, noninstitutional men who did not work during the previous year.

fifths—came from Social Security and disability benefits. Nonworking men who were unable to find work or were providing family care received considerably less income. Just under one-half of unemployed nonworkers' incomes came from unemployment benefits. For those providing family care, about half of their incomes came from assets, while unemployment compensation accounted for another 16 percent. The relatively large fraction of income coming from unemployment compensation could mean that some of these men are providing family care temporarily until they find work.

The bottom panel of Table 5.2 shows the percent of nonworking men living with other adult family members who received income (earned or unearned) during the year and the average amount per other adult (conditional on receipt). Here, family members include all immediate and extended family members living in the same household as the nonworker. Nonworkers who are providing family care are the most likely to be living with other adult family members with income, but there is surprisingly little variation across reasons. Average per-adult income is considerably larger for this group, which suggests that there is some specialization with the man staying at home.

### **Support from Family Members Living in the Household**

It is clear from the preceding analysis that nonworkers' sources of income reflect the high proportion that are sick/disabled, that there is considerable variation in the incidence and amount of income received by reason for not working, and that a large fraction of nonworking men had little or no income. However, most nonworkers lived with other adult family members who received income, suggesting that family members are a possible source of financial support.

The top panel of Table 5.3 compares the distribution of workers and nonworkers across four types of living arrangement: no other family members present, living with a wife, living with parents, and living with other relatives. Compared with workers, nonworking men are less likely to be living with a spouse and are more likely to be living alone, with parents, or with other relatives. In the lower panel, which shows the distribution of living arrangements of workers and nonworkers by income, we can see that the differences are much smaller within income



**Table 5.3 Distribution of Living Arrangements by Employment Status and Income, 2003–2004 Average**

	No other family members in household	Living with wife	Living with parents <sup>a</sup>	Living with other relatives <sup>a</sup>	Total	
All nonworkers	32.2	40.7	18.2	9.0	100	
All workers	22.4	68.6	5.2	3.8	100	
By income (\$2004)						
Nonworkers						Percent
No income	26.3	35.7	25.6	12.4	100	36.4
1–10,000	38.7	36.0	17.9	7.5	100	35.2
10,001–25,000	33.2	49.8	10.3	6.7	100	20.2
25,001+	28.1	61.2	5.3	5.4	100	8.2
Workers						
1–10,000	31.0	45.2	15.6	8.2	100	5.3
10,001–25,000	30.1	54.1	9.2	6.6	100	20.1
25,001+	19.8	74.2	3.3	2.7	100	74.6

<sup>a</sup>No wife present.

SOURCE: Author's tabulations of March CPS data.

categories than overall. Moreover, differences in the distribution of living arrangements between income categories of nonworkers are larger than are the differences between workers and nonworkers within an income category. Thus, much of the difference between workers' and nonworkers' living arrangements is related to the differences in income rather than employment status per se. Because those with the lowest incomes are much more likely to be living with their parents or with "other relatives," these differences by income suggest that family members living with the nonworker could potentially be an important source of financial support.

The top panel of Table 5.4 shows the percentage of nonworking men that received income and the average amount conditional on receipt, by living arrangement. Nonworkers who lived alone or with their wives were about 40 percent more likely to have received unearned income compared with those living with their parents or with other relatives. Married nonworkers had the highest income conditional on receipt, while those living with their parents had the lowest.

The rest of Table 5.4 examines nonworking men's access to income. I assume that they had access to income if they or any family member living in the household received income during the year.<sup>6</sup> The percentage that has access from different relations varies predictably by living arrangement. The bottom panel shows the overall percentage of nonworkers that have access to income from other family members, and we can see that there is surprisingly little variation across living arrangements. Moreover, average total family income (conditional on receipt) is quite similar across living arrangements as well. Over all living arrangements, about 87 percent of nonworkers had access to income, either their own income or income from wives, parents, or other relatives. This also means that nearly 13 percent of nonworking men had no apparent means of support. There is no way to know how they financed their consumption, but there are several possibilities: they received income from nonfamily members that live in the household, they received unreported income from illegal activities or under-the-table jobs, they borrowed money, or they spent down their assets.

Table 5.5 accounts for differences in family size across living arrangements by showing family per capita income and the contributions to family per capita income from nonworkers, their spouses, parents,

**Table 5.4 Percent of Male Nonworkers Who Have Access to Income (own income plus income of relatives living in household) and Amount Conditional on Access by Living Arrangement and Source of Income, 2003–2004 Average**

	All male nonworkers	No other family members in household	Living with wife	Living with parents <sup>a</sup>	Living with other relatives <sup>a</sup>
Percent of nonworkers with unearned income	63.6	70.3	68.0	48.6	49.5
Average amount conditional on receipt (\$2004)	13,486	13,103	15,227	9,696	12,092
Access to income (percent and average amount \$2004)					
From wife	34.2		84.0		
	27,233		27,233		
From parents	18.8		3.8	95.0	
	27,502		20,462	28,127	
From other relatives	21.4		18.8	31.2	90.6
	24,115		18,663	21,785	30,884
Percent with access to income	87.4	70.3	94.6	97.6	95.3
Average total income conditional on receipt (\$2004)	32,301	13,103	39,671	39,173	35,646
Percent of nonworking men	100.0	32.2	40.7	18.2	9.0
Observations	5,746	1,879	2,386	973	508

<sup>a</sup> No wife present.

NOTE: The sample is from the March CPS and is restricted to civilian, noninstitutional men who did not work during the previous year. The first entry in each living-arrangement-by-income-source cell is the percent of nonworking men in that living arrangement that received or had access to income from that source of income. The second entry is the amount conditional on receipt. For example, among nonworking men living with their wives, 84.0% had wives who received some income and the average amount of that income was \$27,233. And 3.8% of nonworking men living with their wives had parents in the household who received income and the average amount of that income was \$20,642. Any parents who did not receive income are not included in the 3.4%.

**Table 5.5 Per Capita Income by Source and Type of Living Arrangement (conditional on receipt of income by the nonworker or any adult family member living with the nonworker), 2003–2004 Average**

	All male nonworkers	No other family members in household	Living with wife	Living with parents <sup>a</sup>	Living with other relatives <sup>a</sup>
Mean per capita income (\$2004)	12,471	12,452	12,753	12,500	11,182
Median per capita income (\$2004)	8,906	8,340	9,010	9,841	8,635
Percent of mean per capita income from					
Male nonworker	44.2	100.0	30.1	14.2	21.3
Wife					
Earned income	23.6		52.4		
Unearned income	4.4		9.7		
Parents					
Earned income	7.9		0.6	37.6	
Unearned income	7.4		0.8	34.7	
Other relatives	12.6		6.5	13.5	78.7
Total	100.0	100.0	100.0	100.0	100.0

<sup>a</sup> No wife present.

NOTE: The sample is from the March CPS and is restricted to civilian, noninstitutional men who did not work during the previous year, and received unearned income or lived with related adults who received income (earned or unearned). Per capita income is computed by dividing the income of all adults living in the household who are related to the nonworker by the total number of related people who are living in the household.

and other relatives conditional on having any family income. Average per capita income was \$12,471 over all living arrangements, and there was remarkably little variation across living arrangements, although per capita income was somewhat lower for nonworkers living with other relatives. Spouses provided about 60 percent of the income in married couples, with most of that being from earnings. When nonworkers lived with their parents (no wife present), the parents' income, about half of which was unearned, accounted for about 70 percent of per capita income.

The relatively small variation in the fraction of nonworking men who have access to income, and in the amounts conditional on having access, suggest that differences in time use across groups will be due more to differences in preferences or productivity in household production rather than differences in income.

## **HOW DO NONWORKING MEN SPEND THEIR TIME?**

For this analysis, I pooled ATUS data from 2003, 2004, and 2005, and restricted the sample to men ages 25–54. Respondents were classified as workers or nonworkers based on the response to the ATUS labor force questions, although I dropped full-time students and the small fraction of nonworkers that reported working at a job on the diary day. Thus my sample consists of 11,560 men, of which 1,184 were not employed.

I collapsed the ATUS activity codes into five main activities: Work-Related Activities, Education, (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; these activities exclude commuting and other work-related travel. Education includes taking classes (either for pleasure or for a degree), extracurricular activities, and homework. 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, doing hobbies, relaxing, and socializing. Personal Care includes sleeping and grooming. Other Activities include other travel, eating and drinking, phone calls, correspondence, and religious activities.

Table 5.6 shows the time spent in each of the five major categories (and selected detailed activities) by nonworkers and full- and part-time workers on an average day. For workers, the time spent in each activity is an average of both work and nonwork days. For nonworkers, of course, all days are nonwork days. Nonworking men spend about an hour more per day doing household work than men who are employed (either full or part time). They spend more time in meal preparation and doing housework, as predicted by theory, although these activities

**Table 5.6 Time Use of Working and Nonworking Men, 2003–2005**  
Average (hrs./day)

	Nonworkers	Workers—average day	
		Part-time	Full-time
Work-related activities	0.23	4.21	6.29
Job search	0.23	0.05	0.01
Education	0.10	0.17	0.05
Household work	3.36	2.31	2.33
Housework	0.43	0.28	0.22
Shopping	0.34	0.27	0.30
Meal preparation	0.46	0.28	0.25
Lawn and garden	0.28	0.18	0.22
Child care	0.44	0.44	0.40
Leisure activities	7.87	5.35	4.16
Watching TV	4.62	3.00	2.18
Socializing	0.98	0.64	0.60
Relaxing	0.44	0.31	0.24
Sports participation	0.28	0.36	0.30
Personal care	10.05	9.53	8.68
Sleeping	9.36	8.96	8.04
Number of observations	1,184	474	9,902
Dissimilarity index		0.170	0.257
comparison of non- workers to workers			

NOTE: The sample is from the ATUS and is restricted to civilian, noninstitutional men.

do not account for all of the difference between workers and nonworkers. Nonworkers spend about an hour and a half more in personal care, mostly sleeping, compared to full-time workers. However, the biggest difference in time use is in leisure time. Nonworking men spend nearly eight hours per day in leisure activities, with TV watching accounting for most of this. In contrast, full-time workers spend just over four hours per day in leisure activities, about half of which is TV watching. Part-time workers fall between full-time workers and nonworkers. Nonworkers also spend more time socializing, although it is important to note that time spent socializing while at work is not included for employed men.

Another way to think about the difference in time use between workers and nonworkers is to account for the time that is freed up by not working full time. The difference in time spent in work-related activities is about 6 hours per day. Of that freed-up time, about 17 percent (1 hour per day) is spent doing household work, 23 percent (1.4 hours per day) is spent in personal care activities, and 61 percent (3.7 hours per day) is spent in leisure activities. Thus, nonworkers do not seem to be substituting nonmarket work for market work to any great extent, so that the lion's share of the time that is freed up by not working is spent in leisure activities. These differences between workers and nonworkers are consistent with the predictions from economic theory, although we might have expected that household production would represent a larger fraction of freed-up time than leisure activities because the former was unambiguously predicted to increase.

These activity-by-activity comparisons make it clear that workers and nonworkers spend their time differently, but they do not tell us how differently. A convenient way to quantify differences in overall time use is to calculate a dissimilarity index.<sup>7</sup> This index ranges between 0 and 1 and is best described as the fraction of time that one group would have to reallocate to make the two groups identical. Thus, a value of 0 means that both groups spend the same amount of time in each activity, and a value of 1 means that the two groups have no activities in common. An index value of 0.05 or less indicates that there is virtually no difference between the two groups, 0.05–0.10 indicates a small difference, 0.10–0.15 indicates a moderate difference, and a value greater than 0.15 indicates a large difference.

The bottom row of Table 5.6 shows the index values for comparisons of nonworkers to part-time and full-time workers. The index values of 0.17 and 0.26 for comparisons to part-time and full-time workers indicate that there are large differences between the two groups, with the difference between nonworkers and full-time workers being considerably larger than the difference between nonworkers and part-time workers.

It is not too surprising that workers and nonworkers differ on an average day, because a large fraction of workers' days are spent in work-related activities. But how different are they when we restrict workers to their nonwork days? In Table 5.7, we can see that there is quite a bit

**Table 5.7 Time Use of Working and Nonworking Men on Nonwork Days, 2003–2005 Average (hrs./day)**

	Nonworkers	Workers, Nonwork days	
		Part-time	Full-time
Work-related activities	0.23	0.14	0.04
Job search	0.23	0.14	0.02
Education	0.10	0.27	0.10
Household work	3.36	3.26	4.54
Housework	0.43	0.48	0.51
Shopping	0.34	0.31	0.58
Meal preparation	0.46	0.33	0.40
Lawn and garden	0.28	0.24	0.48
Child care	0.44	0.51	0.63
Leisure activities	7.87	6.91	6.78
Watching TV	4.62	3.62	3.46
Socializing	0.98	0.93	1.00
Relaxing	0.44	0.60	0.36
Sports participation	0.28	0.56	0.58
Personal care	10.05	10.75	10.03
Sleeping	9.36	10.33	9.45
Number of observations	1,184	195	3,653
Dissimilarity index comparison of nonworkers to workers		0.048	0.054

NOTE: The sample is from the ATUS and is restricted to civilian, noninstitutional men.



of similarity. Nonworkers spend about the same amount of time doing household work as part-time workers and about an hour per day less than full-time workers. Much of the difference between nonworkers and full-time workers on nonwork days is likely due to full-time workers' shifting of household work from workdays to nonwork days. The greater amount of childcare time spent by full-time employed men reflects the fact that men who work full time are more likely to be living with children in addition to the shifting of activities from workdays to nonworkdays. Nonworkers spend more time in leisure activities compared to men who work, but the difference is much smaller than on an average day. The dissimilarity index values at the bottom of Table 5.7 confirm these similarities. Both indexes are about 0.05, indicating that the days are very similar.

Now let's take a look at how time use varies by reason for not working. Table 5.8 shows that the differences in time use by reason are consistent with the economic model presented earlier. Disabled and retired nonworkers spend the least amount of time doing household work, while men who are providing family care spend the most. The relatively small amount of time spent doing household work by the disabled is consistent with lower productivity in household work for these groups. Given that nearly one-third of retired nonworkers receive SSI or SSDI, it is not too surprising that they spend their time much like the disabled. Nonworking men in the Family Care category differ from other nonworkers in that household production activities account for a much higher fraction of the time that is freed up by not working. They spend about the same amount of time doing household work as full-time employed men spend working for pay, although total work is greater for the latter group because they do household work as well. The greater amount of household work done by men in the Family Care category likely reflects specialization with the husband staying at home—men in this category are much more likely to be living in a household with children, as evidenced by the large amount of child care (more than four times as much as any other category).

The bottom portion of Table 5.8 compares overall time use by reason for not working. The dissimilarity index value of 0.06 for the comparison of disabled and retired nonworkers confirms the similarity of these two groups. Comparisons of the Family Care category to the other

**Table 5.8 Time Use by Reason for Not Working, 2003–2005 Average (hrs./day)**

	All non- workers	Reason for not working				
		Disabled	Unemployed	Family care	Retired	Other
Work-related activities	0.23	0.01	0.68	0.06	0.01	0.04
Job search	0.23	0.01	0.68	0.06	0.01	0.04
Education	0.10	0.07	0.07	0.10	0.00	0.30
Household work	3.36	2.41	4.08	6.54	2.95	3.87
Housework	0.43	0.41	0.39	1.26	0.27	0.45
Shopping	0.34	0.26	0.39	0.63	0.23	0.40
Meal preparation	0.46	0.37	0.52	1.08	0.46	0.44
Lawn and garden	0.28	0.17	0.33	0.02	0.51	0.45
Child care	0.44	0.28	0.52	2.12	0.08	0.46
Leisure activities	7.87	9.05	6.86	6.72	8.62	6.82
Watching TV	4.62	5.62	3.69	4.13	4.98	3.84
Socializing	0.98	0.93	1.08	0.77	0.67	1.04
Relaxing	0.44	0.60	0.35	0.19	0.33	0.29
Sports participation	0.28	0.21	0.34	0.17	0.39	0.35
Personal care	10.05	10.54	9.41	8.77	9.58	10.44
Sleeping	9.36	9.81	8.83	8.12	8.37	9.82
Number of observations	1,185	491	394	47	61	191
Dissimilarity index comparison of						
Disabled to...			0.138	0.175	0.061	0.097
Unemployed to...				0.104	0.080	0.052
Family care to...					0.156	0.112

NOTE: The sample is from the ATUS and is restricted to civilian, noninstitutional men.

categories confirm that this group is very different from disabled and retired nonworkers, but only slightly to moderately different from the unemployed.

Table 5.8 also shows that the unemployed spend about 0.7 of an hour per day in job search. This may not seem like very much, but it is consistent with stock-flow theories of job search.<sup>8</sup> Table 5.9 provides more detailed breaks for the unemployed. Men who are “looking for work” spend more time in job-search activities than men who are “on layoff,” but not that much more. These two groups spend similar amounts of time doing household work, in leisure activities, and in personal care activities.

**Table 5.9 Time Use of the Unemployed, 2003–2005 Average (hrs./day)**

	On layoff	All	Looking for work		
			Long-term	Short-term	Unknown
Work-related activities	0.55	0.71	0.85	0.84	0.42
Job search	0.55	0.71	0.85	0.84	0.42
Education	0.02	0.08	0.11	0.00	0.16
Household work	4.24	4.03	3.30	4.65	3.90
Housework	0.32	0.41	0.41	0.40	0.43
Shopping	0.39	0.38	0.49	0.33	0.38
Meal preparation	0.59	0.50	0.41	0.46	0.63
Lawn and garden	0.47	0.29	0.10	0.50	0.22
Child care	0.36	0.58	0.66	0.62	0.43
Leisure activities	6.91	6.87	7.42	6.26	7.11
Watching TV	3.68	3.71	3.69	3.30	4.20
Socializing	0.78	1.16	1.41	1.13	1.03
Relaxing	0.31	0.36	0.19	0.33	0.53
Sports participation	0.60	0.27	0.32	0.20	0.33
Personal care	9.39	9.41	9.52	9.32	9.47
Sleeping	8.86	8.82	8.81	8.91	8.75
Number of observations	83	311	81	116	114
Dissimilarity index comparison of short-term unemployed to...	0.031		0.062		0.049

NOTE: The sample is from the ATUS and is restricted to civilian, noninstitutional men.

Greater differences appear when we distinguish between long-term and short-term unemployed (looking for work).<sup>9</sup> Short-term unemployed had a job at the time of their final CPS interview, which was 2–5 months prior to the ATUS interview. Long-term unemployed have not worked for at least a year, based on information from their final CPS interview. The Unknown category includes men who were not working at the time of the final CPS interview, but were not identified as being long-term nonworkers. Presumably they fall somewhere between long-term and short-term, but there is no way to know for sure. Long- and short-term unemployed spend similar amounts of time looking for work. But the long-term unemployed spend less time doing household work and more time in leisure activities. Perhaps not surprisingly, the dissimilarity index comparisons indicate that the short-term unemployed who are looking for work look more like those on layoff than they do like long-term job seekers, although all of the unemployed categories are fairly similar to each other.

Table 5.10 shows how time use varies by living arrangement. As noted above, the presence of children increases the demand for household work. Thus, it is not too surprising that nonworking men who live with their wives and children spend the most time doing household work and the least amount of time in leisure activities. Nonworking men who live with their parents or with other relatives spend the least amount of time doing household work and the most time in leisure activities. We know that nonworkers who live with their parents have the lowest incomes, which would lead one to believe that they would spend more time doing household work. But working in the opposite direction is the fact that they have access to income through their parents. It is possible that nonworking men who live with their parents are less productive in household work, but it seems more likely that they have a stronger preference for leisure activities.

Finally, Table 5.11 compares the time use of 25–54-year-old nonworkers to retirement-age (55+) nonworking men. Each entry shows the difference between younger (25–54) and older (55+) nonworkers in the amount of time spent in different activities by reason for not working. The differences between the two groups are rather small. Comparing time use activity-by-activity, we see that the largest difference is for time spent in leisure activities, with younger nonworking men spending

**Table 5.10 Time Use by Type of Living Arrangement, 2003–2005 Average**

	Living arrangement					
	All nonworkers	No other family members in household	Living with wife	Living with wife and children	Living with parents <sup>a</sup>	Living with other relatives <sup>a</sup>
Work-related activities	0.23	0.19	0.12	0.41	0.15	0.34
Job search	0.23	0.19	0.12	0.41	0.15	0.34
Education	0.10	0.12	0.08	0.08	0.15	0.00
Household work	3.36	2.47	3.81	4.87	2.28	2.25
Housework	0.43	0.41	0.44	0.55	0.29	0.33
Shopping	0.34	0.27	0.39	0.35	0.40	0.31
Meal preparation	0.46	0.40	0.44	0.62	0.37	0.15
Lawn and garden	0.28	0.19	0.44	0.32	0.22	0.01
Child care	0.44	0.13	0.00	1.40	0.06	0.12
Leisure activities	7.87	8.28	7.85	6.79	8.85	8.28
Watching TV	4.62	4.99	4.38	3.85	5.61	3.79
Socializing	0.98	1.06	0.85	1.11	0.75	0.65
Relaxing	0.44	0.41	0.37	0.38	0.56	1.46
Sports participation	0.28	0.33	0.31	0.22	0.27	0.27
Personal care	10.05	10.34	9.57	9.77	10.51	9.60
Sleeping	9.36	9.69	8.80	9.02	10.00	8.73
Number of observations	1,184	479	176	374	114	41

NOTE: The sample is from the ATUS and is restricted to civilian, noninstitutional men.

<sup>a</sup> No wife present.

**Table 5.11 Comparison of Younger Nonworkers' (25–54) and Older Nonworkers' (55+) Time Use, 2003–2005 Aver-**

	All non- workers	Reason for not working				
		Disabled	Unemployed	Family care	Retired	Other
Work-related activities	0.21	0.00	0.10	—	0.01	0.02
Job search	0.21	0.00	0.10	—	0.01	0.02
Education	0.08	0.03	–0.01	—	–0.02	0.30
Household work	0.29	0.46	0.10	—	–0.22	0.59
Housework	0.14	0.09	–0.07	—	–0.02	0.31
Shopping	–0.05	–0.03	–0.02	—	–0.16	–0.08
Meal preparation	0.05	–0.02	–0.10	—	0.06	0.06
Lawn and garden	–0.27	–0.08	–0.30	—	–0.07	–0.47
Child care	0.42	0.26	0.49	—	0.06	0.44
Leisure activities	–0.56	–0.46	–0.38	—	0.30	–2.20
Watching TV	0.01	–0.49	–0.69	—	0.57	–1.28
Socializing	0.18	0.04	0.40	—	–0.12	0.07
Relaxing	–0.33	–0.41	–0.03	—	–0.41	–0.75
Sports participation	–0.10	–0.01	0.05	—	–0.01	–0.08
Personal care	0.43	0.29	0.52	—	–0.02	1.73
Sleeping	0.40	0.48	0.36	—	–0.58	1.54
Number of observations (55+)	3,409	354	115	4	2,857	79
Dissimilarity index comparison of nonworkers aged 25–54 and 55+	0.042	0.033	0.030		0.013	0.110

NOTE: The sample is from the ATUS and is restricted to civilian, noninstitutional men. A dash indicates that there were not enough observations to generate an estimate.

about one-half hour less time in leisure activities compared to older nonworkers. Overall time use, as measured by the dissimilarity index, is very similar for younger and older nonworkers. When time use is broken down by reason for not working, the two groups look more similar except for the Other Reasons category.

The small differences between older and younger nonworkers is consistent with the findings in a recent study by Krantz-Kent and Stewart (2007) that the time use of the elderly depends more on employment status than on age per se. It is also important to note that older individuals in the ATUS are healthier on average than the population as a whole (Krantz-Kent and Stewart 2007).

## **SUMMARY AND CONCLUSION**

There has been a dramatic increase in the fraction of men who do not work for extended periods of time over the past 35 years. Earlier research has examined sources of support, but relatively little is known about how nonworking men spend their time. This chapter updates what we know about how nonworking men support themselves and uses data from the new ATUS to examine how they spend their time.

Most nonworking men have at least some unearned income; of which Social Security is the most common source, reflecting the fact that most male nonworkers are disabled. Nonworking men with little income are less likely to be living with a spouse and are more likely to be living with their parents or with other relatives. For these low-income nonworkers, family members living in the household are an important source of support. As a result, there is relatively little variation in access to income across living arrangements.

Economic theory predicts that, compared to workers, nonworking men will spend more time doing household work, but could spend either more or less time in leisure activities. The ATUS data revealed that most of the time that is freed up by not working full time is spent in leisure activities—very little of it is spent doing household work. The average day of a nonworking man looks much like the average day off of a full-time worker. Time use varies predictably by reason for not

working. The disabled and retired spend the most time in leisure activities and the least amount of time doing household work. Men providing family care spend as much time doing household work as full-time employed men spend working for pay. The unemployed spend relatively little time looking for work, and fall between the disabled and those providing family care in the amount of time they spend doing household work. Finally, prime-age nonworking men spend their time much like retirement-age nonworkers, which is consistent with the findings of an earlier study that shows that employment status is a more important factor than age in explaining time use.



## Appendix 5A

# Predictions from Economic Theory

Gronau (1986) provides a useful model for examining differences in how workers and nonworkers use their time. The Gronau model differs from standard labor supply models in that goods may be purchased in the market or produced at home, and the time spent not working in the market can be spent in leisure activities or in household production activities.<sup>1</sup> I present the model for a single-person household, and later discuss how things change when there are other people in the household. Using Gronau's notation, the utility function is given as

$$U = U(X, L, H, N),$$

where  $X$  is the value of goods and services purchased in the market plus those produced at home,  $L$  is time spent in leisure,  $H$  is time spent in household production, and  $N$  is time spent working for pay. The individual maximizes utility subject to the following constraints:

$$X = X_M + f(H) = W \times N + V + f(H) ;$$

$$T = L + H + N,$$

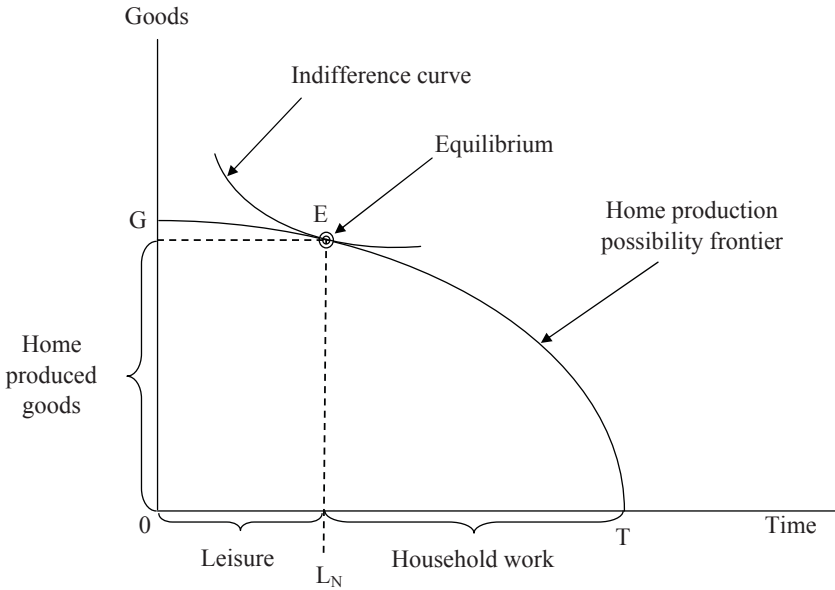
where  $X_M$  represents the value goods and services purchased in the market,  $W$  is the individual's market wage,  $V$  is unearned income, and  $f(H)$  is the home production function ( $f_H > 0$  and  $f_{HH} < 0$ ). The first constraint states that the value of goods and services consumed by the individual equals the sum of earned and unearned income plus the value of goods and services produced at home. The second constraint states that the time spent in market work, nonmarket work, and leisure must equal the total time available.

There are several features of this model that are worth noting. First, as is evident from the first constraint, home-produced goods are perfect substitutes for market goods. This may seem unrealistic, because households clearly do not produce most of the goods that they consume.

An alternative way to specify the model would be to allow goods and services to enter into the production function separately, and to assume that home production is a perfect substitute only for services. Under this specification, the qualitative results are the same, so I used the simpler specification. Second, the time spent in market and nonmarket work enters directly into the utility function. This allows individuals to obtain utility or disutility from these activities. I assume that, at the margin, the marginal utility of time spent in these activities is negative, and that the disutility of work is concave ( $U_H, U_N, U_{HH}, U_{NN} < 0$ ). Third, market goods do not enter into the production function. This is consistent with the notion that home production is a substitute mainly for services, but abstracts somewhat from reality in that much of this production would involve the use of household capital (vacuum cleaners, stoves, dishwashers, etc.) or market goods (food, cleaning supplies, etc.).

Figure 5A.1 illustrates the equilibrium for a nonworker. Goods are measured along the vertical axis and leisure time is measured along the horizontal axis. The curve labeled GT is the home production pos-

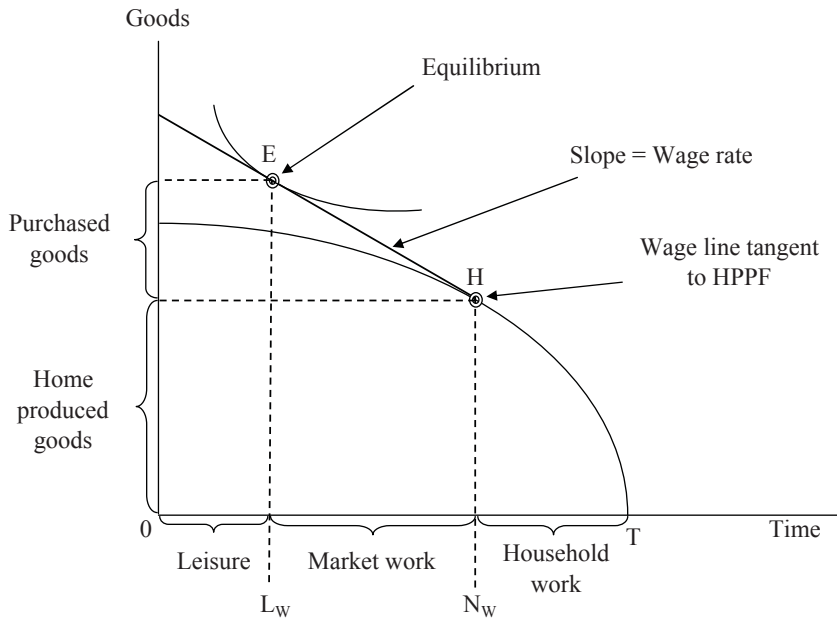
**Figure 5A.1 Home Production Equilibrium—Not Employed**



sibilities frontier (HPPF) for this individual, and shows attainable combinations of goods and leisure time. At point T, the individual spends all of his time in leisure and consumes no goods, while at point G the individual consumes 0G worth of goods (produced at home) and spends no time in leisure activities. The equilibrium for this individual is where his marginal rate of substitution between goods and leisure is equal to the marginal rate of transformation, which is the point at which his indifference curve is tangent to the HPPF (at point E).<sup>2</sup> The total amount of time available, 0T, is divided between leisure activities, 0L<sub>N</sub>, and household production, L<sub>N</sub>T.

Figure 5A.2 shows the equilibrium for a worker. The individual's choice set is the same except for the addition of a wage line, which is tangent to the HPPF (at point H) and has slope equal to the negative of the wage rate. At the tangency point, the individual is equally productive in market and nonmarket work. At points to the right of point H the slope of the HPPF is greater than the slope of the wage line indicating

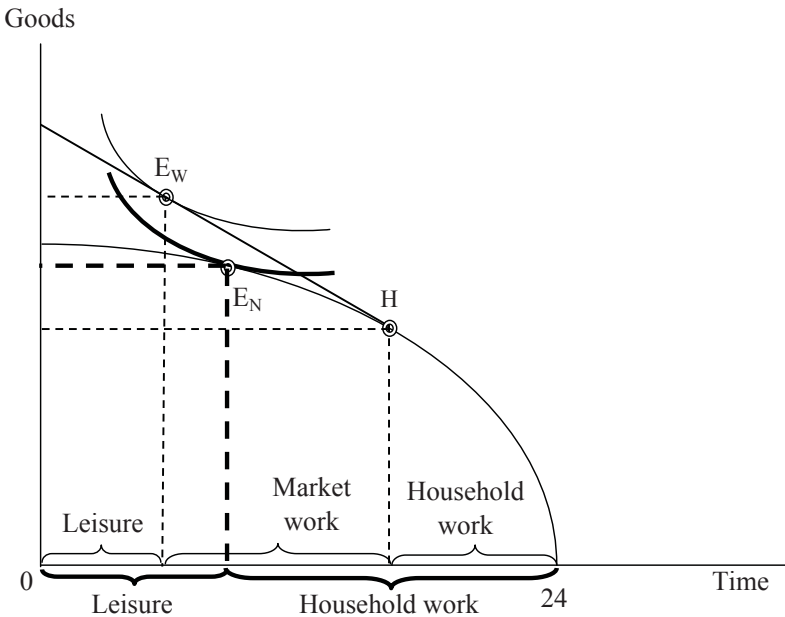
**Figure 5A.2 Home Production Equilibrium—Employed**



that the individual is more productive doing nonmarket work, while to the left of H the individual is more productive in market work. Thus, the point of tangency between the HPPF and the wage line determines the amount of time spent in household production (shown by  $N_wT$ ). The point of tangency between the indifference curve and the wage line determines the amount of time spent in leisure activities,  $0L_w$ . The time spent in market work is simply the remainder ( $T - N_wT - 0L_w$ ) or  $L_wN_w$ .

Finally, Figure 5A.3 compares workers and nonworkers. As drawn, nonworkers spend more time in both leisure and household production activities. However, if one works out the mathematics of the optimization problem it can be shown that it is only the time spent in household production that is unambiguously greater, because the income and substitution effects both work to increase the amount of time spent in household production activities. For leisure, the income and substitution effects work in opposite directions. The flatter slope of the budget

**Figure 5A.3 Comparison of Employed and Not Employed**



set to the left of point H means that time spent in nonleisure activities is less valuable and tends to increase the amount of time spent in leisure activities. But the smaller budget set leads the individual to spend less time in leisure activities.

There are a number of assumptions embedded in Figures 5A.1–5A.3. First, it is assumed that workers and nonworkers have the same preferences and are equally productive at nonmarket work, so that the only difference between them is that nonworkers' wages are so low that they choose not to work. However, it is also possible that nonworkers do not work because they have a stronger preference for leisure or nonmarket work or that they are more productive in nonmarket work. It can be shown that, under reasonable assumptions, individuals who are more productive in household production activities will spend more time in these activities. Thus we would expect disabled nonworkers, who are likely less productive in household production, to spend less time doing household work. In contrast, the presence of children tends to increase the productivity of time spent in household work, because they can look after their children at the same time. Thus we would expect nonworkers who live with children to spend more time doing household work. Differences in preferences for leisure matter, because those with stronger preferences for leisure will spend less time in household production activities. Finally, greater amounts of unearned income or income from other family members will shift up the HPPF (a pure income effect) and tend to reduce the amount of time spent in household production activities and increase the time spent in leisure activities.

### Appendix Notes

1. In an earlier paper, Becker (1965) presents a model in which goods and leisure do not directly enter the utility function. Instead, households combine time and market goods to produce commodities, from which household members derive utility. For example, going to the movies is produced by combining purchased movie tickets (the market good component) and time spent going to the movie (which includes travel time to and from the theater and time spent waiting in line, in addition to the time actually watching the movie). The drawback to this approach is that it is impossible to derive testable implications about time spent in leisure and household production activities.
2. Recall that an indifference curve shows combinations of goods, in this case goods and leisure, that generate the same amount of utility.

## Notes

1. Author's tabulation of March Current Population Survey (CPS) data.
2. Household production activities include doing housework, preparing meals, doing yard work, performing house or vehicle maintenance or repairs—anything that satisfies the “third-person criterion” that the same results could have been obtained if done by a third person (Reid 1934). To illustrate the third-person criterion, cooking a meal satisfies this criterion, but eating it does not. Throughout this essay, I will use the terms nonmarket work, household production, and household work interchangeably.
3. A normal good is one whose consumption increases as income increases.
4. The analysis of ATUS data in the next section covers the years 2003–2005. The 2006 March CPS data (covering 2005) were not available at the time I performed this analysis. However, adding the 2005 data likely would have little effect on the results.
5. See Stewart (2006b) for details on data and methods.
6. It is impossible to know how income is distributed among family members, and the implicit assumption is that income is distributed approximately equally.
7. I use the weighted absolute deviation index given below:

$$D = \sum_{i=1}^6 \left\{ \frac{|a_i - b_i|}{a_i + b_i} \left( \frac{a_i + b_i}{\sum_{i=1}^6 (a_i + b_i)} \right) \right\} \doteq \sum_{i=1}^6 \left\{ \frac{|a_i - b_i|}{\sum_{i=1}^6 (a_i + b_i)} \right\}$$

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  $b$ . For each comparison, I computed the index using the six major aggregated activities. See Stewart (2006a) for a more complete description of dissimilarity indexes.

8. According to these theories, immediately after individuals become unemployed, they spend a lot of time looking for work as they investigate the jobs that are available at that time. After this initial search activity, they only need to check for new job openings.
9. Those who are on layoff are, by definition, short-term unemployed.

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