

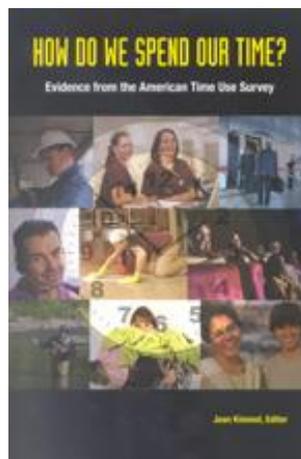
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## The Time of Our Lives

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# 1

## The Time of Our Lives

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Time is the ultimate scarce resource, yet we do not pay enough attention to its scarcity. This chapter presents information on allocations of this limited resource in the United States and elsewhere. More important, however, I wish to illustrate how economics can provide insights into the role of time in our lives. A recent pair of advertisements for Mont Blanc pens shows Johnny Depp (or Julianne Moore) holding a pen and saying, “Time is precious, use it wisely.” That expresses the essence of my argument: Time is scarce, and because economics is to a large extent the study of scarcity, we as economists have something unique to offer to the analysis of how people spend their time.

The empirical motivation for much of the discussion is the American Time Use Survey (ATUS). Using those and other data, I demonstrate that in a variety of ways the United States is really a strange country in terms of time. I show in a variety of contexts how men and women differ in their relation to time. I examine when people do things and how that has changed over time, and I discuss an increasingly important policy issue: the relation among time use, retirement, and skill shortages.

The central idea motivating much of this discussion comes from Becker (1965): Time is scarce, in that we all only have 24 hours a day—whether a rich or poor person, or a rich or poor country. Both a rich person and an average person in a rich country have many more dollars to spend per unit of time than does a poor person in a poor country. Now, time by itself is of no use whatsoever. One may lie on the bed and occasionally just look at the ceiling, doing nothing, but mostly we use the things that we buy in conjunction with the time that we have available. We take a vacation and we spend money on hotels and airfare and touring and so on. We have to choose not just how to spend time but how to

combine time and goods together. Given that time and goods are used together, it is clear that for higher-income people and in richer countries, time is relatively more scarce than goods. Time scarcity is not a problem if you have little money to spend with the time you have.

One might argue that although there are only 24 hours in a day, people are living longer and thus have more total time available over their lives. As the second column of Table 1.1 shows, that is correct: Over the past half century, the average American's longevity has risen sufficiently to provide 10 percent more years to him/her. Also, these are healthier years and, as Murphy and Topel (2006) show, the health improvements compound the improvements in well-being. The 10 percent extra years of life pale, however, compared to the increase in real incomes, which have tripled on average over the past half century. We have gotten much richer, yet we have not obtained much more time in which to spend our vastly increased incomes.

The same issue pertains to an individual as his earnings increase and time becomes more valuable over the life cycle. This became very apparent to me when I started doing economics in the mid-1960s. Two years after we got married, my wife and I took a two-week vacation

**Table 1.1 Real Income per Capita and Life Expectancy at Birth, United States, 1955–2005**

Year	Per-capita disposable income (\$, 2000)	Life expectancy at birth (years)
1955	9,280	69.6
1960	9,735	69.7
1965	11,594	70.2
1970	13,563	70.8
1975	15,291	72.6
1980	16,940	73.7
1985	19,476	74.7
1990	21,281	75.4
1995	22,153	75.8
2000	25,472	77.0
2005	27,340	77.8

SOURCE: *Statistical Abstract of the U.S.*, various issues.

camping in Nova Scotia and New Brunswick, Canada. We drove our beat-up car, stayed in campgrounds, and did our own cooking. In 1989, when my wife was practicing law and I was very busy, we took a one-week vacation to France, staying at good hotels, eating at one-star restaurants and, of course, flying across the Atlantic.

## HOW WE (AND OTHERS) USE TIME

What people actually do with their time in this country can be seen using the ATUS. Because the basic data are coded into 406 categories, I, like anyone else using them, must decide about appropriate aggregation. I have combined the activities into four particular types. Table 1.2 shows that on a typical day in 2003, men are working for pay for about 313 minutes and women are working for pay for 201 minutes. The next category, household production, consists of things like shopping, cooking, cleaning, washing the dishes, and child care, i.e., all the things that you might pay somebody to do for you. You could have a cook, a shopper, a cleaner, and a babysitter. We call these activities home work, unpaid work, and other things. As the table shows, women are doing much more of these than men, which is no surprise. Tertiary activities are anything that you must do some of—sleep, wash, eat, and others;

**Table 1.2 Average Time Allocations, by Category, United States, 2003, All Respondents Ages 20–74 (minutes per representative day)**

	Men	Women
Market work	313	201
Household production	163	271
Family care	28	60
Shopping	43	59
All work	476	472
Tertiary time	616	641
Sleep	496	511
Leisure	348	327
Radio/TV	160	134

SOURCE: Burda, Hamermesh, and Weil (2008).

sleep accounts for the bulk of such time. Lastly, leisure includes things that you do not have to do but that you do for fun. There are slight differences by gender, with women spending more time sleeping, washing up, cleaning up, etc., and men spending more time in leisure. Men work more in the market, women work more at home, but the sums of market and home work, and thus the sums of tertiary activities and leisure, are almost identical across genders.

Although the data are not strictly comparable, it is worth examining how time spent in the critical activities, shopping and child care, has changed in the United States by gender. As Table 1.3 shows, and as we already saw for 2003, it is no surprise to find that women are spending more time in these activities than men. The most recent year’s data for child care may be problematic, but certainly between the 1960s and 1990s women were spending less and less time taking care of kids. Partly this is because more women are working for pay, but also (and related to rising female wage rates and labor force participation) there were fewer kids. The average household was producing 3.5 kids in the 1950s, today that number is down to 2. It is worth noting, however, that men and women are sharing more of the shopping and child care, whether as cause or effect of women’s increased labor force participation.

Let us compare the United States to other countries. Burda, Hamermesh, and Weil (2008) make similar calculations to those in Table 1.2 for Germany, Italy, and the Netherlands, which are presented in Table 1.4. The thing to note is that we work more for pay than the average adult in these European countries. I could have included many

**Table 1.3 Minutes per Day in Shopping and Child Care, by Gender, All Respondents Ages 19–64, 1965–2003**

	1965	1975	1985	1992–94	2003
	Shopping				
Men	36	44	46	36	40
Women	61	64	57	56	59
	Child care				
Men	14	13	14	8	12 <sup>a</sup>
Women	54	37	27	20	32 <sup>a</sup>

<sup>a</sup>Probably defined more broadly than in earlier surveys.

SOURCE: Harvey (2006).

**Table 1.4 Average Time Allocations (minutes), Women and Men, All Respondents Ages 20–74, Germany, Italy, and the Netherlands**

	Germany 2001–02		Italy 2002–03		The Netherlands 2000	
	Female	Male	Female	Male	Female	Male
Market work	133	263	133	290	124	254
Household production	312	174	347	115	268	145
Family care	42	18	39	19	51	17
Shopping	66	49	53	33	53	36
All work	445	437	480	405	392	399
Tertiary time	675	654	593	595	659	634
Sleep	509	499	499	497	524	504
Leisure	320	349	367	440	389	407
Radio/TV	100	135	89	114	99	119

SOURCE: Burda, Hamermesh, and Weil (2008).

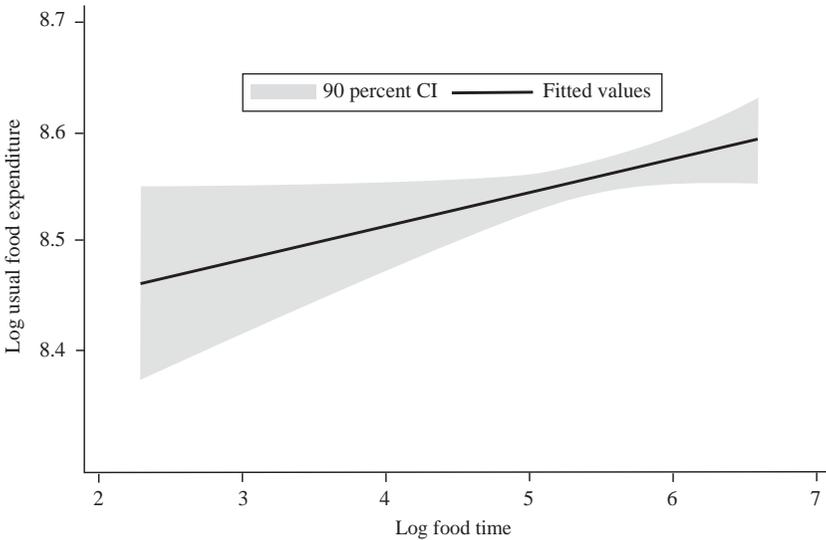
other European countries—even Japan—and we would still find that the average person does not work as much in the market as the average American does. Since these calculations fail to account for vacation time, and since our vacations are shorter than those in other economies (Altonji and Oldham 2003), they understate the excess of paid work here compared to other rich countries.

Comparing across gender in Tables 1.2 and 1.4, consider the total of unpaid work in the household and work for pay. In the three Anglo-Saxon countries, total work time is almost identical by gender—the differences are 2 percent or less. Only in the Mediterranean country do we find the popular expectation—that women do more work in total than men (and implicitly have less free time)—to be true (even though the fertility rate in Italy is among the lowest in Europe). Whether this equality is a general phenomenon and what causes it are things that I am now actively engaged in studying.

## INCENTIVES FOR COMBINING TIME AND GOODS

The relationship between goods inputs and time inputs into an activity is unclear. Averaging across all activities, there can be no relationship, as each person spends the same total amount of time—24 hours—on the activities he or she engages in. So the answer depends on whether, relative to the average activity, goods and time are more or less readily substitutable in the particular activity in question. If they are not, we will observe a positive relationship between goods purchased and time spent. Figure 1.1 examines this issue for food spending and time inputs into food (shopping, cooking, eating, and cleaning up). The

**Figure 1.1 Relation between the Natural Logarithm of Annual Food Expenditure and Time Spent Shopping for and Preparing Food, Eating and Cleaning Up, U.S. 2003–2004 (horizontal axis is minutes per day, vertical axis is \$ per year)**



NOTE: 90% CI is the 90% confidence interval around the predicted values of the logarithms of food spending at the logarithms of time spent on eating, food preparation, clean-up, etc.

SOURCE: Hamermesh (2007).

data are for ATUS respondents in 2003 and 2004 matched to the Food Security Supplements in the December 2002 and 2003 Current Population Surveys (CPS). The figure shows that households that spend more on food also devote more time to all the aspects of eating. (This holds even if we adjust for family composition.) This suggests that it is fairly difficult to substitute goods for time in the particular activity of eating.

As Tables 1.2 and 1.4 show, by far the biggest single activity in which people engage is sleep. Is sleep an economic activity—does it respond to economic incentives—or is it purely biologically determined? Taking earlier research (Biddle and Hamermesh 1990), one can use results from the 1975–1976 Time Use Study to calculate for men and women the *ceteris paribus* effect of higher wages. Dividing human activity into only three categories—sleep, market work, and everything else—the first row of Table 1.5 shows time allocations for men and for women whose time price is half the average for their gender. The middle row shows these at the average wage, and the bottom row presents time allocations for people earning twice the average wage. People with higher wages (or potential earnings) sleep less. I would argue that this occurs because the alternative to sleep—working for pay—is relatively more advantageous for them. Indeed, when the unpublished version of this paper circulated, the *New York Times* ran a story about it with the headline, “Sleep? Why? There’s No Money in It” (Passell 1989). People have things other than sleep that they can do with their time, and one of those, market work, becomes more attractive when the returns to it rise.

The effects of higher wage rates on time spent sleeping are not so large for women as for men, suggesting that, perhaps for biological rea-

**Table 1.5 Effects of Wages on Time Spent Sleeping and in Other Unpaid Activities, United States, 1975–1976 (minutes per representative day)**

	Men			Women		
	Sleep	Other nonwork	Work	Sleep	Other nonwork	Work
Wage is:						
Half the average	495	595	350	494	710	236
Average	487	605	348	497	698	245
Twice the average	469	628	343	503	672	265

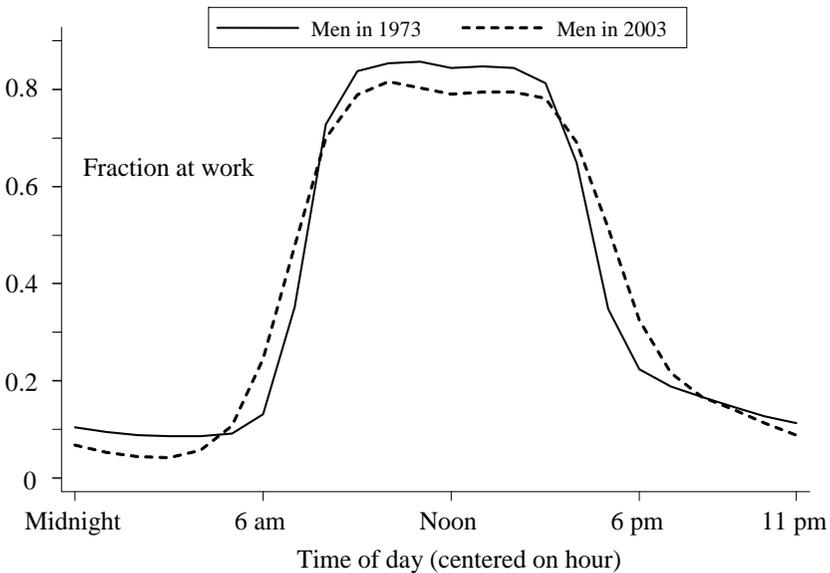
SOURCE: Calculated from Biddle and Hamermesh (1990).

sons, the marginal value of sleep for the average woman exceeds that for the average man. Of course, we find the usual result that women’s market work time is more responsive to changing incentives than that of men; but the response is all along margins of household production and leisure, and hardly at all along the margin of sleep time. The main conclusion, however, is that even something which one might believe is not responsive to economic incentives—sleep—reacts just the way that economists might expect.

**WHEN WE DO THINGS**

A widely held notion is that people are now working around the clock in this country—a 24/7 economy. The virtue of time-diary data, such as those comprising the ATUS, is that one knows exactly what each

**Figure 1.2A Timing of Work over the Day, Men, 1973 and 2003**

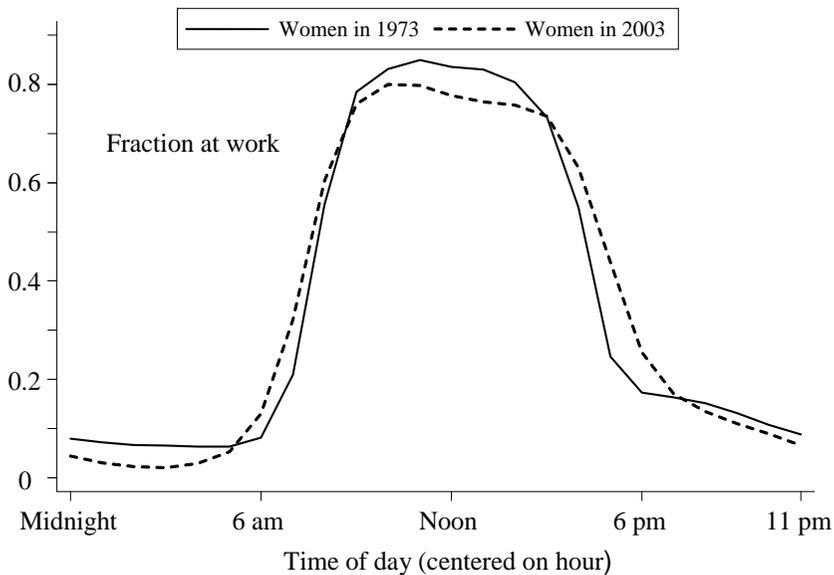


SOURCE: Calculations from Hamermesh (1999) and raw data.

sample respondent is doing at each point in the day. One can, therefore, summarize the fractions of the population engaged in specific activities in each time interval—for our purposes, during each quarter-hour of the day. Included in the calculations here are all those people who work for pay on the diary day, with male and female workers in Figures 1.2A and 1.2B respectively. The data for 1973 are based on the May 1973 CPS Multiple Jobholding Supplement (Hamermesh 1999), which included questions about starting and ending times of market work, while the 2003 data are from the ATUS. In each figure the total amounts of work time have been adjusted to be equal, so that the figures isolate the effect of differences in the distribution of the timing of market work across the day.

Not surprisingly, most of the work for pay is performed in the middle of the day, with very few people working at 3 a.m. The interesting thing to note here is that, from midnight to 6 a.m., the line for 1973 lies above that for 2003 among both men and women. Thirty years ago we

**Figure 1.2B Timing of Work over the Day, Women, 1973 and 2003**



SOURCE: Calculations from Hamermesh (1999) and raw data.

were doing a greater fraction of our work late at night, and similarly for the late evening hours on the right-hand side of the figures. We were also working more during the middle of the day. The big change is not that we are working at night more than before; we are not. Rather, we are performing a much greater fraction of our work at fringe times—early morning, 5–8 a.m., and early evening, 5–7 p.m.

We make decisions about timing over the day, but we also make decisions about timing over the week, the year, and a lifetime. While major chunks of the literature in applied micro- and macroeconomics have dealt with the last of these temporal decisions (essentially looking at life-cycle choices about labor supply), very little has been published on the first of these (but see Hamermesh [1996]). To demonstrate the potential importance of this issue, in Table 1.6 I present information on the hebdomadal distribution of market work by gender in the same four countries for which information was given in Tables 1.2 and 1.4.

What stands out in this table, beyond the fact that I have already demonstrated how much market work Americans do, is how much work we perform on weekends compared to northern Europeans. Indeed, even compared to Italian men we do a greater share of our total market and household work on weekends. Coupled with the fact that Americans have fewer days of vacation than do citizens of the wealthier

**Table 1.6 Time Allocations, All Men 20–74, Weekdays and Weekends Separately, Four Countries (minutes per representative day)**

Activity	Day	Germany 2001/02	Netherlands 2000	Italy 2002/03	U.S. 2003
Men					
Market work	Weekdays	340	333	357	392
	Weekends	67	57	124	112
All work	Weekdays	512	471	467	538
	Weekends	245	217	251	318
Women					
Market work	Weekdays	173	161	165	257
	Weekends	33	33	55	63
All work	Weekdays	503	443	519	522
	Weekends	299	265	383	351

SOURCE: Burda, Hamermesh, and Weil (2008).

European nations, it is clear that we tend to spread our work temporally much more than in other rich economies.

One aspect of life-cycle behavior has been especially heavily studied, namely, retirement/labor-force withdrawal. To me the most interesting aspect of the issue is why people retire—why they go from working full or nearly full time to no market work at all. The incentive effects of Social Security and pension benefits, both labor supply phenomena, have been studied extensively. I want to concentrate instead on incentives resulting from what goes on inside the household—how older people spend time and the effect of working in the market on their allocation of nonmarket time.

As an academic I am very lucky: At any time from my early sixties on I can partly retire—teach half-time or less during the academic year for a set number of years—but retain my job. I could teach full time one semester and have the other eight or more months to do other things, including travel and uninterrupted research. I would receive half my salary and keep my office. There are very few other jobs where a worker can do this. The inability to retire partially in the same job is a problem, because there is an increasing number of highly skilled people who retire fully. At a time when most developed countries are facing or will face increasing skill shortages, partly caused by demography, this loss of older skilled workers seems increasingly serious. Given that older people are healthier at a given age than were earlier older cohorts, policies that inhibit partial retirement or, indeed, that fail to offset incentives for full retirement, implicitly lead to the early destruction of human resources.

To begin, consider how the allocation of time changes over the life cycle. Table 1.7 presents averages by age of time allocations on a typical day for ATUS respondents in 2003 and 2004. Comparing the data for all respondents 55–59 to the same data for all people 65–69, whether they work for pay or not, we see that this decade is where the big drop-off in time spent in market work occurs: A drop from 256 minutes on a typical day down to 87 minutes. Where do these nearly three hours of time go each day? Family care and other household production rise a little bit, maybe 40 minutes a day, and sleeping and eating also rise by around 30 minutes. The big change is in the consumption of leisure, with nearly

**Table 1.7 Time Use by Age, United States, 2003–2004 (minutes per representative day)**

Activity	Age					
	<55	55–59	60–64	65–69	70–74	75+
Market work	256	258	178	87	51	14
Other household production	146	187	198	221	225	204
Family care	67	40	49	46	38	32
Tertiary						
Sleep	513	492	505	515	528	543
Personal care	46	50	49	48	46	49
Eating and drinking	68	79	84	88	94	93
Leisure						
TV watching	142	165	189	218	230	250
Other	192	158	175	202	213	236
Other	10	11	13	15	15	19

SOURCE: Donald and Hamermesh (2007).

two-thirds of the time freed up from market work going into leisure—and over half that amount going into additional television viewing.

The question is: Would people possibly enjoy life more, and would society get more out of its highly skilled work force, if people could intersperse leisure and work in a more even pattern over their lives? There is substantial evidence (Gronau and Hamermesh forthcoming; Hamermesh 2005) that temporal variety rises with income at the daily and weekly levels, so why not at the level of the life cycle? One possibility is that there are fixed costs of working just a little bit that cause disruptions to our scheduling of nonwork activities. For example, I need to wear a tie to teach, I need to wash up, I have to socialize with people whom I might not like, my mind is on work even when I am not working that day, etc. Working a little bit disrupts our lives and affects how and when we do our nonwork activities. Does a person who works a little bit behave differently from someone who does not work at all? Does labor force entry affect how people spend time away from work?

I take the 2003 and 2004 ATUS data and estimate how time spent in each of household production, tertiary activities, and leisure is affected by minutes of market work and whether one works, adjusted for a wide variety of demographic characteristics. Using those results, in Table 1.8 I simulate how the typical American adult would spend her time if she did no market work, worked for pay just one minute, did the average amount of work, or worked full time. Of course, the average person, or the full-time worker, spends less time in leisure and less time in household production than nonworkers: There is an adding-up constraint of 1,440 minutes per day. The crucial finding, however, is the difference between the nonworker and someone who works only a little bit for pay. The results show that labor market entry causes one to shift one's non-market activities around, consuming less leisure and engaging in more household production. Implicitly the fixed cost of market work induces people to alter their nonmarket behavior.

In the last seven or eight years, people 65 and older have been working just a little bit longer. The reversal of the trend toward reduced labor force participation among older workers is not due to the stock market decline in the early part of this decade (Coile and Levine 2006), nor is it due to increases in the age of eligibility for full Social Security retirement benefits, because that happened more recently. Perhaps it is because people have begun to realize that they need to work more than 40 years to support a retirement that could well last 30 years. Perhaps, however, companies and workers have begun to see the benefits of restructuring work so that older people can enjoy the benefits of variety and their employers can make continued use of their skills.

**Table 1.8 Average Daily Minutes by Paid Work Status, Ages <60, United States, 2003–2004 (minutes per representative day)**

	Market work	Household production	Tertiary activities	Leisure
Nonworker	0	324	675	429
Just one minute of work	1	341	679	407
Average person	263	234	620	313
Full-time worker	343	203	602	280

SOURCE: Calculated from Donald and Hamermesh (2007). Eleven minutes per day could not be classified.

Timing does matter, but how we time our activities is subject to choice, and an interesting question is, What timing is desirable? One aspect of desirability is whose timing is the same as one's own, and the most important person in many people's lives is their spouse. I thus examine who gets to spend time with his or her spouse. This is an economic decision: Although we want to spend time with our spouses (if not, presumably they would not be our spouses for long), spending time with them is costly. It constrains one's flexibility in earning income, so that synchronizing one's schedule with one's spouse's time is costly. Assuming, as seems reasonable, that the fixed costs of scheduling are independent of time prices, and assuming that spousal time is superior, we should find that higher-income couples spend more time together. The spouses take jobs that might not be quite as good as possible in order to spend time together. They still earn a lot more than others, but not as much more as they otherwise would. In other words, one of the extra benefits the rich get out of life is more of the desirable good, time with one's spouse.

Using the CPS May Multiple Jobholding Supplements, I examine for 1973 and 1978 combined, and for 1991 and 1997 combined, the timing of work among couples with two working spouses. In each case I have controlled for the total hours that each works for pay, so that the calculations abstract from differences in the *amount* of labor supplied to the market. If each spouse, for example, works 8 hours per day for pay, it is possible that they could have 16 hours to spend together. Or, however, their schedules could be completely disjointed so that they only have potentially 8 hours to spend together. The calculations are presented in Table 1.9. Going from a couple with each spouse in the tenth percentile of earnings to one with each spouse in the ninetieth percentile shows a small but clear increase in the amount of overlap in their

**Table 1.9 Joint Leisure among Full-Time Working Couples, 1970s and 1990s (hours per day)**

Hourly wage is:	1970s	1990s
10th Percentile	13.0	12.3
Average	13.2	12.5
90th Percentile	13.4	12.8

SOURCE: Calculated from Hamermesh (2002).

work schedules. Couples in the upper part of the earnings distribution have roughly an extra half hour a day potentially to be together. While this is not a huge amount, it is about 5 percent of the average amount of time not accounted for by market work. This finding suggests that, if we measure well-being based solely on incomes, we understate inequality, since higher-income households have foregone some earnings in order to obtain schedules that allow potentially for more joint leisure.

Couples do schedule themselves very much together; they tend to work in a nonrandom way at the same time and be off at the same time. Hamermesh (1996) shows this to be the case both in the United States and in Germany. Indeed, there is only one demographic group in which the spouses' schedules appear to be completely independent. Not surprisingly, that is couples with young children: If both work for pay, one is likely to be at home taking care of the children while the other is at work. Most couples, however, tend to schedule much of their work time simultaneously, more so than one would expect if this process were random.

## **HOW WE FEEL ABOUT TIME—AN ECONOMIC APPROACH**

Most of us feel that we do not have enough time. Given the limitations discussed in this chapter's introduction, this is not surprising. As economists, we can use the simple insights discussed there to study feelings about being pressed for time and use that study to weigh the importance of such complaints. Time is relatively scarce for higher-income people—partly because their time is more valuable due to market alternatives, partly because they have more income to spend in the same amount of time as the poor, and goods and time are not perfectly substitutable in generating outcomes that increase our happiness. If this is true, we should find the rich complaining more about being rushed for time.

I proposed this idea to a large U.S. foundation whose staff were mostly psychologists and sociologists. The staffers felt that this idea was typical economists' nonsense, responding, "Can't the rich simply have lots of time by paying people to do all the work for them at home

that they otherwise would have to do?” In other words, as a wealthier person, I can have somebody clean my house, maintain my garden, install halogen light bulbs, etc., and thus generate lots of time for myself. The answer is a resounding no, because the number of things that I can outsource is really very small. I cannot outsource my sleeping. Nobody can eat for me, attend a symphony for me, or watch the Super Bowl for me. Given this difficulty in substituting goods for time, we should expect more whining about feeling rushed by members of wealthier households.

In each of four countries’ large national surveys, respondents were asked how often they feel pressured for time. In Australia, Germany, and the United States, five answers were possible: 1) always, 2) almost always, 3) sometimes, 4) almost never, or 5) never. In Korea only four responses were possible. The distributions of the responses in the four surveys are shown in Table 1.10. Clearly, in each country a large fraction of adults view themselves as rushed much of the time; and very few feel themselves under time pressure only infrequently.

Is the theory of time and goods as joint inputs into utility consistent with what we observe about the impact of income differences on people’s feelings about being pressured for time? Consider Figures 1.3A and 1.3B, which present information for men and women, respectively, for the four countries. Each bar presents average household earnings for a particular response to the time-stress question, moving from left to right for each sample from the second most time-stressed group to the least time-stressed group. For comparison purposes earnings are set equal to 100 in each sample for those who say they are always stressed for time—the most time-stressed group—and they are not included in

**Table 1.10 Percent Distributions of Time Pressure, Couples—Australia 2001, Germany 2002, United States 2003, and Korea 1999**

Under time pressure:	Australia		Germany		United States		Korea	
	Men	Women	Men	Women	Men	Women	Men	Women
Always, almost always	43.4	50.5	34.3	36.4	42.6	54.5	70.7	68.5
Sometimes	41.9	39.3	38.2	41.7	33.5	29.8		
Rarely, almost never, never	14.7	10.2	27.5	21.9	23.9	15.7	29.3	31.5

SOURCE: Hamermesh and Lee (2007).

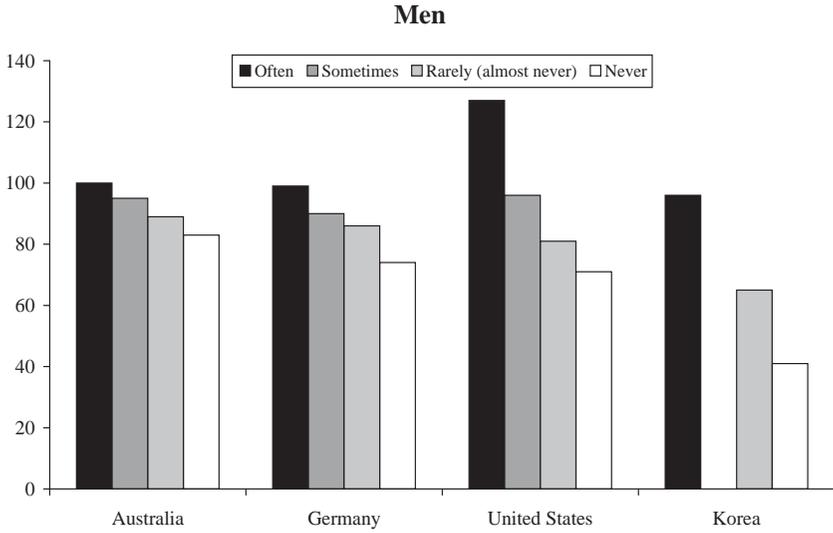
the graph. Numbers below 100 indicate that a group's earnings are less than that of the most time-stressed group.

In most cases, as one moves rightward from the darker bar to the successively lighter bars in Figures 1.3A and 1.3B, average household earnings decrease. Those who express less time stress are those who are earning less. The same result holds when we adjust for how much time people work for pay—the phenomenon arises from differences in time prices, not only from differences in total income. When people complain about how rushed and stressed their life is, they are really complaining that they have lots of money. If they are upset, they could choose to work less and earn less; that they do not choose to work less suggests that, despite the complaints, their utility is higher in the more stressed situation. Indeed, and not surprisingly in light of the theory, those who express more stress for time also are more likely to be satisfied with their income. The poor complain about lack of income, because income is relatively scarce for them, and the rich complain about lack of time, because time is relatively scarce for them. I am more sympathetic to the former set of complaints, but others may have different values.

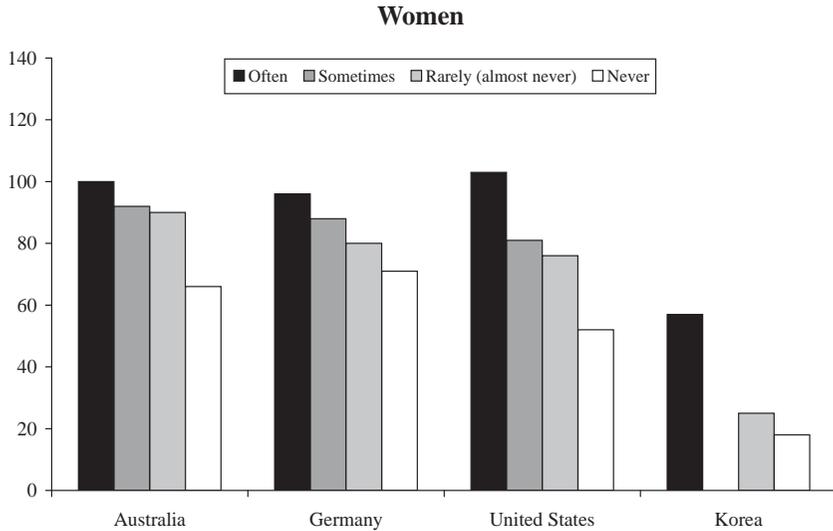
Table 1.10 also documents a difference in feelings of time pressure by gender: In all countries except Korea, women are significantly more likely to feel that they are rushed for time. (Korea is different from the others because women are much less likely than men to engage in market work, a major source of time pressure.)

Why do women feel more rushed for time? It is not due to the presence of children at home, as the same gender difference exists when one adjusts for the presence of children and even for the time spent in caring for them. One possible explanation is that there are costs of switching among activities—fixed costs of changing what we do—that lead to feelings of being rushed. In six countries, Australia, Germany, Israel, the Netherlands, Sweden, and the United States, Gronau and Hamermesh (forthcoming) examine the number of different activities engaged in on an average day by married men and married women. In each case wives did more different things than their husbands, which could lead to feelings of being rushed. Another possible explanation is that, beyond the additional uses of time in which women engage, they are also managers of the household—they are on call for problems. Yet another, related possibility is that these difficulties combine with fixed costs and rigid scheduling to impose tighter constraints on women's use of time.

**Figure 1.3A Household Earnings by Time Stress (earnings = 100 if always stressed)**



**Figure 1.3B Household Earnings by Time Stress (earnings = 100 if always stressed)**



SOURCE: Hamermesh and Lee (2007).

## CONCLUSION

The creation of the ATUS as a continuing survey is the single most important data initiative in the labor area to occur in the 40 years since I completed my doctoral degree. Over time it will provide enough information on small demographic groups to allow analyses of the non-market behavior of nearly any group in which researchers are interested. It will enable us to chart how time use varies over the life cycle and the business cycle. One caveat is in order, however: Other social scientists are as capable as economists at summarizing allocations of time and making simple comparisons. Our comparative advantage lies in going beyond this to creating interesting theory-based hypotheses that can only be tested with the kind of data on nonmarket time that the ATUS generates. The ATUS should be a boon for economic research, but it also challenges us to think like economists rather than to mimic sociologists.

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