

# ECONOMIC COMMENTARY

Federal Reserve Bank of Cleveland

## The Myth of the Overworked American

by Kristin Roberts and Peter Rupert

A perennial debate that has become even more sharply contested in recent months concerns the size and scope of government participation in markets. Free-market proponents believe that unfettered economic competition delivers the greatest prosperity level for the citizenry. Opponents challenge the record of private enterprise to improve the standard of living of individuals from all walks of life. A specific claim is that U.S. workers are increasingly being faced with the unpleasant option of either working ever harder—and enjoying life ever less—or consuming less and watching their material comforts diminish.

The presumption of declining leisure without compensating increases in the standard of living has served as a platform for proposed government-sponsored interventions into labor markets. Although the details and effectiveness of any given program can be debated, declining leisure opportunities, if true, quite likely spell a downward trend in the well-being of working men and women, and trouble for the proponents of a laissez-faire approach to economic policy.

The central message of this *Economic Commentary* is that the presumption of declining leisure is in fact a fallacy. Previous studies purporting to have uncovered such a fact have not adequately disentangled time spent in home production—activities such as meal preparation, laundry, home maintenance, or child care—from time spent enjoying leisure activities.<sup>1</sup> By carefully examining how nonmarket time is divided into home production and leisure, we document a

trend that has far-reaching consequences for labor policy initiatives: Although the average worker is spending more time working for pay than in the past, this change has not come at the expense of leisure. It represents, instead, a shift from time spent in home production to time spent in market activities.

Such a change may come as little surprise. The proliferation of labor-saving home appliances and service-sector conveniences has dramatically affected most of our lives. As we argue here, it should also alter the way we think about the “overworked American” and any resulting policy prescriptions.

Our analysis finds that while hours of market work and home work have remained fairly constant for men since the mid-1970s, market hours have been rising and home production hours have been declining for women, as shown in figure 1. The latter trend also holds true for couples when both are employed in the market full time. Possible reasons include an increase in market versus nonmarket productivity or labor-saving technological advancements in the home. The substitution of one type of work for another in response to a change in relative productivities contributes to making the household better off.

### ■ Home Production Models

Despite important research in the area of household production in the mid-1960s and early 1970s, economists modeling individual behavior, especially in macroeconomics, have largely omitted hours of work in the home (that which produces

Are U.S. workers toiling ever harder to maintain their standard of living and, if so, is it coming at the expense of leisure time? Survey data report that over the past decade, total hours of annual work have not changed by much, but the composition of labor has shifted from home work to market work. Nearly all of the difference can be attributed to changes in the total hours worked by women.

consumption goods).<sup>2</sup> This omission apparently stems from a lack of data on hours of home labor, on capital goods in the home (microwaves, power tools, etc.), and on the output of such work. Some recent literature, however, has shown that models including a home production sector are better able to account for several aspects of aggregate economic time series and that there is some support for the substitution hypothesis.<sup>3</sup>

In other words, there are many ways to produce consumption goods using varying amounts of home and market time, and the amount of time spent in an activity is sensitive to changing economic conditions. Consider, for example, dinner. A family can “produce” dinner by combining capital equipment and time to produce the final product, a meal. But this can be done in many ways. We can combine our car with the time it takes to drive to a restaurant, order food, and eat. Or, we can combine our car with the time it takes to stop at the store, purchase frozen food, and then heat it in a microwave.

At the other extreme, we could combine a hoe, some dirt, and seeds to grow and then harvest our own food. Those who are "too busy" doing market work tend to minimize the time spent producing goods themselves by eating out, buying a microwave, or hiring cleaning and landscaping services.

Such home production models of household behavior can deliver vastly different results compared to models without home production, a fact that is relevant for policy analysis. Consider, for example, the effect of an increase in the labor tax rate on an individual who is working in the market and paying for child care. She may decide to decrease her market work (since each additional hour now earns less) and boost hours of home production. The more willing she is to substitute home- for market-produced consumption, the larger will be the change in her market hours. That is, higher taxes may lead her to work fewer market hours (or stop altogether) and provide her own child care.

### ■ The Data and Empirical Findings

To investigate the importance of properly controlling for home production, we arbitrarily sort households into two types: married couples with wives working in the market full time and those with wives out of the market labor force (neither working in the market nor looking for market work). We use the Michigan Panel Study of Income Dynamics (PSID) data set, which interviews individuals and families over time, to examine the mean number of weekly work hours from 1976 to 1988, the last year for which data are available (see table 1).<sup>4</sup>

In 1976, for example, in households where the wife is out of the market labor force, 44.6 total hours are spent in market work per week, while home work equals 38.4 hours, giving a total of 83 weekly work hours.<sup>5</sup> In families where both individuals work in the market full time (more than 35 hours per week), market work is 83.2 hours, home work falls to 26.2 hours, and total work is 109.4 hours.

**TABLE 1 WORK HOURS OF HUSBANDS AND WIVES**

	1976			1988		
	Total work	Market work	Home work	Total work	Market work	Home work
Married, wife is out of labor force	83.0	44.6	38.4	82.4	44.2	38.2
Husband	49.0	44.6	4.4	50.2	44.2	6.0
Wife	34.0	0.0	34.0	32.2	0.0	32.2
Married, both work						
full time	109.4	83.2	26.2	109.5	86.2	23.2
Husband	50.0	44.0	6.0	52.2	44.8	7.3
Wife	59.4	39.2	20.2	57.3	41.4	15.9

SOURCE: Authors' calculations from the Michigan Panel Study of Income Dynamics.

Obviously, this does not imply that when both members of a couple work, they neglect their home. As mentioned above, they may be able to substitute less time-intensive methods to produce the final good. For example, if a person's market wage rises, he may choose to stop working on his old car and either hire someone to do the repairs or buy a new vehicle. If we were observing only market work, we might mistakenly infer that his total hours of work rise and leisure then falls. However, once home production enters into the picture, this interpretation may no longer hold true. He could substitute two hours more of market work and reduce the time spent working on his old car by four hours, so that his total hours of work would actually fall.

Consider the differences in hours worked in 1988 versus 1976. In households where wives are out of the market labor force, we detect little change in weekly market hours in 1988 (down 0.4 hours) or in home hours (down 0.2 hours). In two-worker households, there is virtually no change in total weekly hours, but time has shifted from home to market work: Hours of market work increased by three per week from 1976 levels, while home labor fell by three hours per week. Figure 2 presents a year-by-year breakdown of total, market, and home work for various types of households. As mentioned above, for households with two full-time workers, there has been little change in the total amount of work. While market work has been increasing, home work has been declining at a nearly offsetting pace.

One explanation of this latter trend is an increase in the relative productivity of

market- versus home-produced goods, leading to a change in the ratio of home to market hours. Other possible factors contributing to the substitution from home to market work are technological change in home production, including labor-saving innovations, more readily available child-care options, and the decline in family size over this period.

Table 1 also shows that in 1988, the total weekly work of a household where both persons are working full time, 109.5 hours, is much greater than that of a household where the wife is out of the labor force, 82.4 hours. Home work, on the other hand, is lower: 23.2 hours for two-worker households compared with 38.2 hours in single-earner households. That is, the reduction in home hours accounts for only about half of the gain in total hours between the two types of households. The remaining difference evidently comes out of leisure time.

This same pattern holds true for earlier years, but total hours of home work do not decline as much, perhaps reflecting the better substitution possibilities in 1988 compared to 1976, such as higher wages or labor-saving home appliances. These results highlight the fact that there is substitution between market and home work, but it is not one-for-one.

Interestingly, men do not appear to change their behavior much in response to a change in their spouse's market labor force status, as shown in figure 3.<sup>6</sup> Men work roughly 50 hours per week for both types of households. Table 1 shows that in 1976, for households where wives are out of the labor force, men work 4.4

hours per week in the home and 44.6 hours in the market, while women work 34 hours per week in the home. Total work in such households is 49 hours for men and 34 hours for women. Turning to two-worker households, in 1976 men work in the home about 6 hours, while women who work full time in the market spend 20.2 hours per week working in the home. However, men's total work stays roughly the same (increasing about one hour per week), whether or not the spouse is in the labor force, while wo-

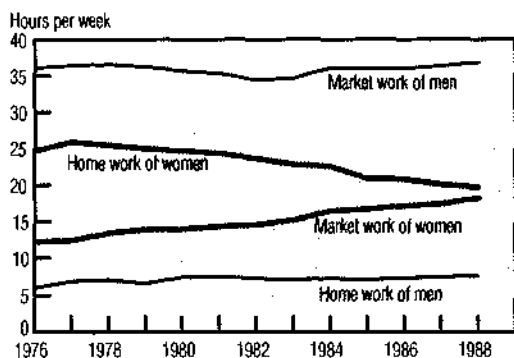
men's total work is now nearly 60 hours per week. Evidently, all of the change in total hours of household work results from women changing their mix of hours as well as their total hours.

Figure 3 illustrates total work, market work, and home work for husbands and wives for the two different types of households. Panel B shows that hours of market work for women working full time has been drifting up over time, while for men it fell until about 1983 and has been rising since. Compared to 1976, for two-worker households, women in 1988 work about two more hours per week in the market and men about one more hour. In terms of home production, women in 1988 work about four hours per week less than in 1976 and men about 1.3 hours more. Even though both are working full time in the market, women worked about 3.3 times as many hours in the home as men did in 1976, but this number fell to about 2.1 times as many hours in 1988.

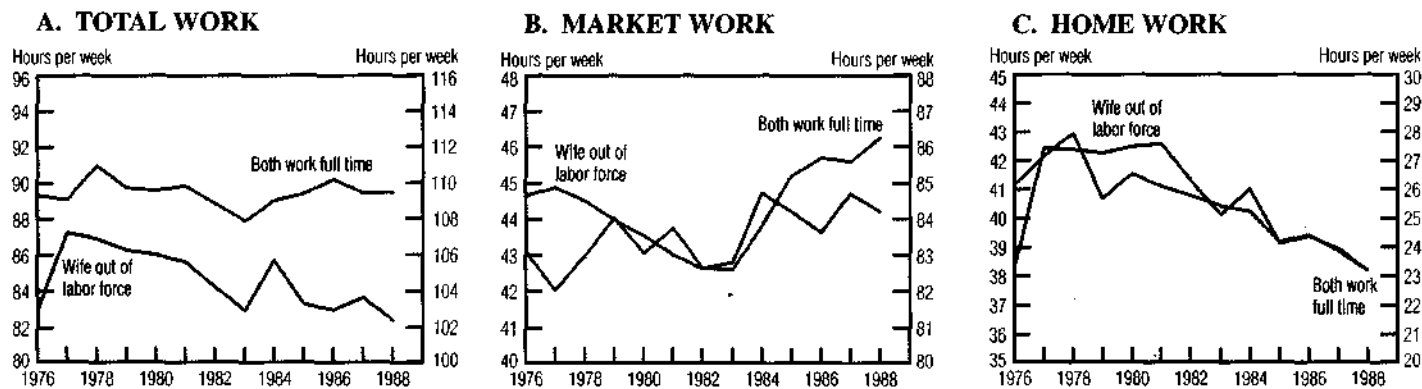
One factor that is often said to affect the distribution of hours is the increase in the market labor force participation rate of women. Looking at households where the husband is in the market labor force, 46.6 percent of wives were in the market labor force in 1976 and 61.3 percent in 1988. The market labor force participation rate for married men, on the other hand, has remained fairly stable at about 83 percent.

Also, the increase in the share of married women participating in the market labor force is not just a phenomenon of younger cohorts. If we look at the same individuals from 1976 through 1988, we find similar results: a jump from 48.5 percent to 59.9 percent. Again, this may stem from a change in relative productivities in the market and home sectors and the ability to substitute one type of work for the other.

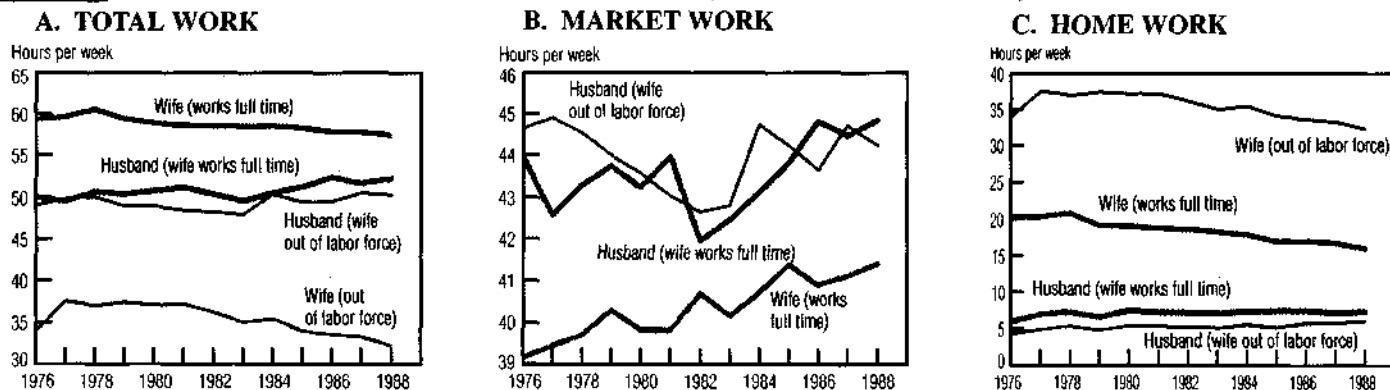
**FIGURE 1 HOURS OF WORK**



**FIGURE 2 TRENDS IN HOUSEHOLD HOURS (MARRIED COUPLES)**



**FIGURE 3 TRENDS IN HOUSEHOLD HOURS (HUSBANDS AND WIVES)**



SOURCE: Authors' calculations from the Michigan Panel Study of Income Dynamics.

## ■ Conclusion

Although total hours of annual work did not change much from the mid-1970s to the late 1980s, the composition between market and home hours of work was dramatically affected. Nearly all of this shift can be attributed to women changing their hours. Moreover, the difference in hours of total work between households with wives working at home and those with wives in the market labor force is also due almost entirely to changes in the total hours of women.

While our analysis offers no conclusions about the quality-of-life implications of these labor trends, it does make clear that the overall number of leisure hours has not declined for American families. We are simply spending more time working in the marketplace and fewer hours in home production. In that regard, we should cast a wary eye on reform proposals that would intervene in the labor market to remedy a leisure time shortage that does not exist.

## ■ Footnotes

1. See, for example, Juliet B. Schor, *The Overworked American: The Unexpected Decline of Leisure*, New York: Basic Books, 1992.

2. See Gary S. Becker, "A Theory of the Allocation of Time," *Economic Journal*, vol. 75 (September 1965), pp. 493-517; and Reuben Gronau, "The Intrafamily Allocation of Time: The Value of the Housewives' Time," *American Economic Review*, vol. 63, no. 4 (September 1973), pp. 634-51.

3. See Jess Benhabib, Richard Rogerson, and Randall Wright, "Homework in Macroeconomics: Household Production and Aggregate Fluctuations," *Journal of Political Economy*, vol. 99, no. 6 (December 1991), pp. 1166-87, for the former; and Peter Rupert, Richard Rogerson, and Randall Wright, "Estimating Substitution Elasticities in Household Production Models," *Economic Theory*, forthcoming.

4. We begin in 1976 (although the PSID begins in 1968) to maintain consistent questions throughout all years because some questions were not asked prior to 1976.

5. Market work refers to annual hours of work on all jobs, including overtime. To make the numbers easier to interpret, we simply divided annual hours of work by 52 to get weekly hours. Therefore, it is irrelevant whether the change comes from increased hours per week or more weeks per year.

6. We have not looked at the behavior of women as men change their labor force status because the sample is quite small when we restrict it to men not in the labor force.

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*The views stated herein are those of the authors and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.*

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