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Engines of Liberation - Additional Notes

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## Abstract

These short notes supplement the discussion in Greenwood, Seshadri and Yorukoglu (2004) on time-use studies and female labor-force participation.

1. *Time-Use Studies*: The paper reports a remarkable drop in the time spent on housework from 58 hours a week to just 18 hours over the period 1900 to 1970 – these numbers come from Lebergott (1993). Some social historians maintain that the time spent on housework has remained constant. They quote an *old* study by Vanek (1973, Tables 3.2, 4.14, and 4.15), who reported that the total time spent on housework has remained constant at 26 hours a week for an employed mother and 55.4 hours a week for a non-employed one. Her findings have long since been questioned.
  - (a) As mentioned in the paper, Roberts and Rupert (1995) report, using data from the Panel Study on Income Dynamics, that between 1976 and 1988 the time spent on housework by a working wife fell significantly from 20.2 hours per week to 15.9. The time spent by a nonworking wife dropped very slightly from 34.0 to 32.2 hours per week.

- (b) Likewise, in another time-use study Gershuny and Robinson (1988) state: “The results of this U.K./U.S. cross-time comparison seem unequivocal, at least with respect to routine domestic work. Contrary to conventionally accepted wisdom, domestic work time has been declining for women” (p. 551). They find that between the 1960s and 1980s the time spent on housework fell by 72 minutes a day, after *controlling for* factors such as paid work and the number of kids.<sup>1</sup>
- (c) Cain (1984) notes that there are several problems associated with Vanek’s work. Even taking her numbers at face value, he notes that the average time spent on housework must have declined from 53 hours a week to 41, since the number of working mothers (who spend less time on housework than do non-working ones) has increased. He argues that the hours reported in the 1920s sample are not directly comparable with the sample in the 1960s, because the former is plagued by some severe sample selection problems. Specifically, he notes that the sample in the 1920s is not representative of all families of interest. Nonresponse and attrition reduced the sample by more than 50% (of the 1,200 women who were reached by the county agents, only 513 usable records remain). This led to an over-representation of women with higher educational backgrounds and higher status. This would lead to an underestimate of the time spent in housework in the 1920s. Two other sources of bias are also analyzed by Cain: first, the busiest wives are less likely to participate in the time-use sur-

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<sup>1</sup>Incidentally, Robinson is the director of the time-use project at the University of Maryland.

veys, and second, wives with larger number of children were underrepresented. This would lead to an underestimate of the time spent in housework in the 1920s. He partially corrects for these biases and extrapolates the data back to 1890 and argues that “Over the period 1890 to 1975-76, married women’s housework is estimated to have decreased by 41 percent” (from 66 hours per week to 39 hours per week).

- (d) The Lynds (1937), in their classic Middletown study, provided a statistical account of time spent on housework in 1924. A team of sociologists led by Caplow replicated (in 1977 and 1999) the well-known study by the Lynds in Middletown (the original study was done in 1924) – see Caplow, Hicks and Wattenberg (2001). In 1924, 87% of married women spent 4 or more hours doing housework each day. Zero spent less than 1 hour a day. By 1999 it had plummeted to 14% and 33% of women spent less than 1 hour a day.
- (e) The paper reported upshot of a study done by the Rural Electrification Authority on the time saving nature of appliances. A similar study was reported in *Ladies’ Home Journal*. Here are the results:

ESTIMATED WEEKLY HOURS SAVED BY APPLIANCES

<i>Task</i>	<i>With Appliances</i>	<i>Without</i>	<i>Time Savings</i>
Breakfast	7	10	3
Lunch	10.5	14	3.5
Dinner	10	12	2
Dishwashing and Clearing	10.5	15.75	5.25
Washing and Ironing	6.5	9	2.5
Sewing and Mending	3.5	4	0.5
Bed making	2.75	3.5	0.75
Cleaning and dusting	2	3	1
<i>Total</i>	<i>52.75</i>	<i>71.25</i>	<i>18.5</i>

Source: "Making Housekeeping Automatic,"  
*Ladies' Home Journal*, 37, September 1920.

2. *Labor-Force Participation by Single Women*: The paper focused on labor-force participation by married women. Labor-force participation for single women has also increased over time – see Figure 1, where once again the data comes from Goldin (1990, Tables 2.1 and 5.1). As can be seen, historically single women have worked more than married ones. It's unclear how to treat single women, though. At the turn of the last century most young single women lived at home, until they were married. They surrendered a large part of their earnings to the family. Today, most would live alone and transfer little or none to their family. Therefore, how should a single women be treated:

- (a) incorporated into the family's maximization problem;
- (b) taken as solving her own problem with,
  - i. the decision to remain within the family unit assumed to

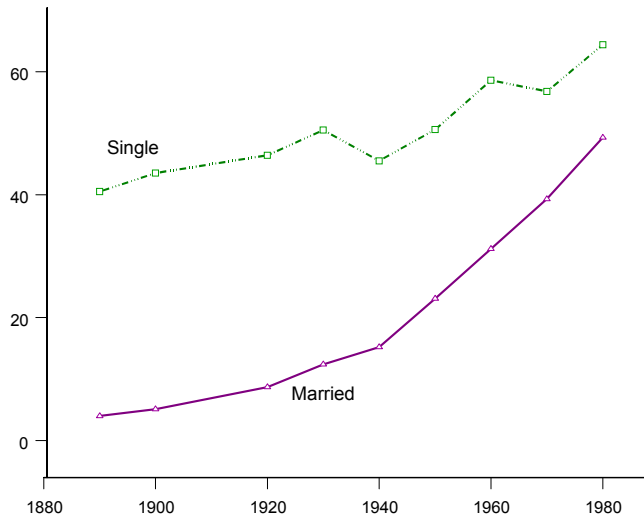


Figure 1: Female Labor-Force Participation: 1890-1980

be exogenous,

- ii. the decision to remain within the family being modelled exogenously, say as in models of marriage and divorce?

In fact the decision of many single women and men to live alone today may reflect the fact that it is much less costly in terms of time to run a household today versus yesteryear.

## References

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