# Human Capital, Effort, and the Sexual Division of Labor

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#### 1 Introduction

The major cause of the increased participation of married women appears to be the increased earning power of married women. The growth of earning power raised the forgone value of their time spent at child care and other household activities, which reduced the demand for children and encouraged a substitution away from parental time. Both of these changes raised the labor force participation of married women.

The gain of marriage was reduced, and the attractiveness of divorce increased, by higher earnings and labor force participation of married women, because the sexual division of labor within households became less advantageous. This raised the divorce rate. And the decline in marriage was reflected also in the increase in "consensual unions". Decline of divorce rate also made fertility go down.

This paper goes through all those kind of interactions.

## 2 Human Capital and the Division of Labor

The incentive to invest in human capital specific to a particular activity is positively related to the time spent at that activity. This explains empirically why married women have earned significantly less than married men since women have participated in the labor force much less than married men.

It can also be said that investments in specialized human capital produce increasing returns and thereby provide a strong incentive for a division of labor even among basically identical persons. Economies of scale from investments in activity-specific human capital encourage identical members of a household to specialize in different types of investments and to allocate their time differently. Earnings display increasing returns to the total time allocated to the activity, and it implies that earnings are maximized when all time is spent on just one activity. Thus there will be gains from trade even if all persons were identical, because each person can then concentrate on one activity.

This analysis can be applied to the division of labor. The advantages of investments in specific human capital encourage a sharp division of labor among household members. But it does not say anything about the sexual division of labor. Becker suggests that men and women have intrinsically different comparative advantages not only in the production of children, but also in their contribution to child care and possibly to other activities.

#### 3 The Allocation of Effort

Women's labor force participation increased. But earnings difference still remains. Why? Assuming that women have the household responsibilities, the earnings of women are adversely affected by household responsibilities even when they want to participate in the labor force as many hours as men, because they become tired, must stay home to tend to sick children or other emergencies, and are less able to work odd hours etc. In this section Becker develops the model of the allocation of

energy (effort) among various household and market activities, and shows how the allocation of energy is affected by the energy intensities of different activities, and also how its allocation interacts with the allocation of time and with investments in market and non-market human capital.

In the model he assumes, earnings are proportional to the "effective" quantity of time (effort per hour  $\times$  hours worked).

The incentive to increase one's supply of energy is shown to depend positively on market human capital and other determinants of wage rates.

A decrease in hours worked and an increase in leisure, induced by a rise in property income, would save on energy and raise the energy value of time, because work is more effort-intensive than leisure. Then the energy spent on each hour of work and other activities would increase by the same proportion, which would raise hourly earnings and the productivity of each hour spent on other activities. Conversely, a compensated increase in market human capital that raises hours worked would reduce the energy value of time, and hence also the energy spent on each hour of work.

## 4 Division of Labor in the Allocation of Effort Between Husbands and Wives

Since more energetic persons have a comparative advantage at effort-intensive activities, efficient marriage markets match more-energetic with less-energetic persons. A larger fraction of the time of energetic spouses would be allocated to effort-intensive activities like work where they have a comparative advantage, and a larger fraction of the time of sluggish spouses would be allocated to the household activities where they have a comparative advantage.

Assume that women have responsibility for child care and other housework for reasons unrelated to their energy or to the effort intensity of housework. Then married women allocate less energy to each hour of work than married men who spend equal time in the labor force. Then they earn less per hour than married men, so the household responsibilities of married women reduce their hourly earnings below those of marries men even when both participate the same number of hours and have the same market capital. Then married women would invest less in market human capital than married men.