Continued

Lecture Note

Gender Economics (EE364)

Chapter 4: Differences in gender-related time allocation for market and non-market activities

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Chapter 4

Differences in gender-related time allocation for market and non-market activities

4.3 Labor–household time decision model

Household and family production - In the previous section, we assumed that labor has two activities that must be undertaken: work and leisure. However, in reality, workers do not spend all their time on resting, but spend most of their time in the household production (e.g., cooking, cleaning, child-rearing). Therefore, this section will integrate household time and household production into the model – "Labor – household time decision model".

Labor – household time decision model - Household time consists of household production and leisure. Household production include preparing food, taking care of children, cleaning the house, etc. As most people do not think household production activities as leisure activities, so we need to include these alternative activities (or household production activities) in the model. Then, we will apply from "labor-leisure choice" model to be "labor-household time decision model". Therefore, instead of the labor-leisure tradeoff, we can model the labor-household time tradeoff. In this model, an individual will decide between work in labor market (labor, or out-of-household) and household time (time spent within the household).

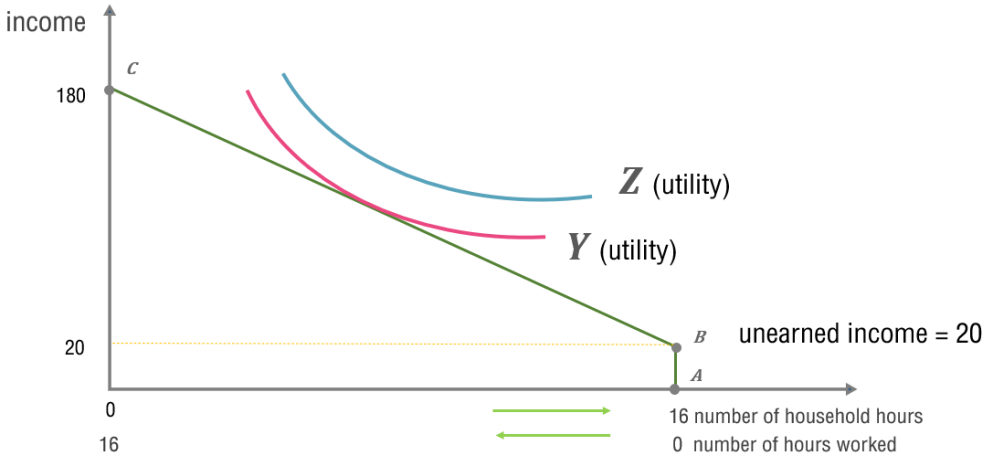
Assumptions

(i) **Budget constraints** remain the same as the previous model. However, in this model, unearned income is added to the model. What is unearned income? Suppose a woman does not work outside home (work only within household), she earns income zero baht. However, if her husband gave this woman 20 baht a day, her unearned income will be equal to 20 baht per day. This woman's budget line is raised by 20 baht (even if working in the labor market = 0 hours) (Figure 4.8).

(ii) **Indifference Curves (IC)** show preferences for leisure activities and household activities. However, the properties of the IC lines remain the same. Flat IC - Workers tend to focus more on working in the labor market than in households, or "Workaholics" tend to have relatively flat IC lines. However, steep IC - Workers tend to prefer household chores and leisure rather than working in the labor market. For example: Say-at-home mothers who like to work at home, take care of house, and raise children tend to have steep IC lines. However, a person's IC can change over the course of a lifetime. For example, housewives and women who prefer to stay at home

with young children will have steep IC lines. However, when the child reaches school age, her IC line may flatten because there is no need to care for the child. At this time, she may become more willing to work in the labor market.

Figure 4.8 – Choosing between working time and household time



Intra-household resource allocation - Decisions on shared work within the household. In the past, while women specialize in domestic work (e.g., baby care, cooking, cleaning, etc.), men specialize in working in the labor market for wages. However, with the increasing participation of women in the labor market, we need a model that explains shared decision-making in the household. Two models can be used to explain this allocation.

(1) Unitary preference model - A household consists of two people (husband and wife). Both husbands and wives have the same preferences (same utility function). One person generally makes decisions about work in the labor market and household consumption. This person's decision affects the whole household's utility. The advantage of this model is that having a single utility function makes it easier for households to achieve maximum utility. The disadvantage is that the assumption of the same utility/preference is not based on reality.

(2) Intra-household bargaining models - A household consists of two people, a husband and wife. The spouse with more access to resources and a break-up strategy (can threaten divorce–leave marital status) has greater decision-making power within the household. For example, the case - a woman is employed vs. a woman is unemployed. If a woman is unhappy in the marriage and is not working, it is difficult for her to leave the marriage, as she must rely on her husband. He would have no motivation to make a compromise decision. If a woman has a job, her income enables her to leave (can divorce–leave marital status). The threat of termination (divorce–

termination of marriage) gives women more bargaining power, and husbands become more involved in compromising on household decisions. Threat to divorce – leave marital status - is a key factor in this model.

4.4 How does having children affect work decisions for men and women?

Question: Who should be at home to raise children? There are two options: (i) Who is more productive at home? And (ii) Who has higher productivity in the labor market? The opportunity cost of staying at home is wages. Therefore, couples must balance the wages lost from having one person stay home to take care of the children. How can both achieve maximum household utility? To make a decison on supply labor to the labor market, the decision in this model depends on the order of each spouse's preferences and bargaining power.

In the past, women are often at home with the children. Women are considered "more appropriate" in terms of raising children and as being more efficient in parenting. Mothers (mostly) are more capable of raising children (biologically). Furthermore, women's market wages are lower than those of men's. The opportunity cost for women to stay at home is lower than that for men. When choosing a career, women may experience discrimination at work. In general, men have higher opportunity costs, while women are considered effective in raising children. There is a division of labor: men specialize in market work and women in non-market work. Nowadays, Thai women work both inside and outside the home, and the participation rate in the labor market is very high for married women (Liao and Paweenawat, 2021).

If a woman's wage increases while her husband's wage remains constant, how do household decisions differ? Assume that household production remains constant, but the opportunity cost of household production for women is higher. Men may choose to have their wives work more in the labor market. The husband will then spend more time on household production (work outside the home may remain constant, but he may rest less, or he may work less outside the home but spend more time in the household). The theory does not indicate the direction of final outcome of the husband's labor supply. The collective decision to supply labor to the labor market is based on a negotiation in the household according to the order of personal preference of the husband and wife, including the bargaining power of each.

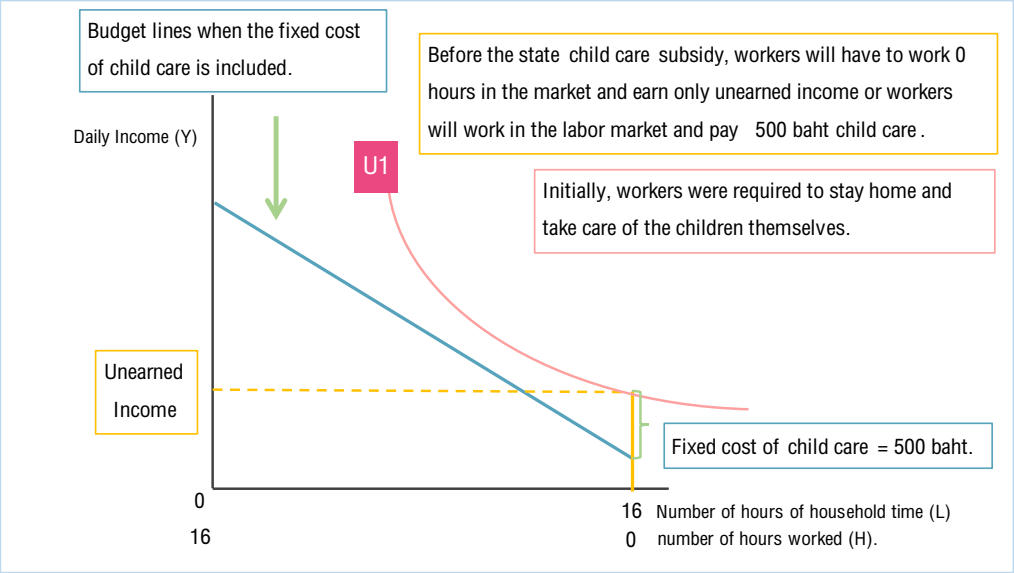
Household and family production: Raising children - One of the highest costs and burdens of family production is childcare. There are several options on raising children, childcare: homecare (father or mother stays home to care for the children), hire someone (nanny) to do so, or

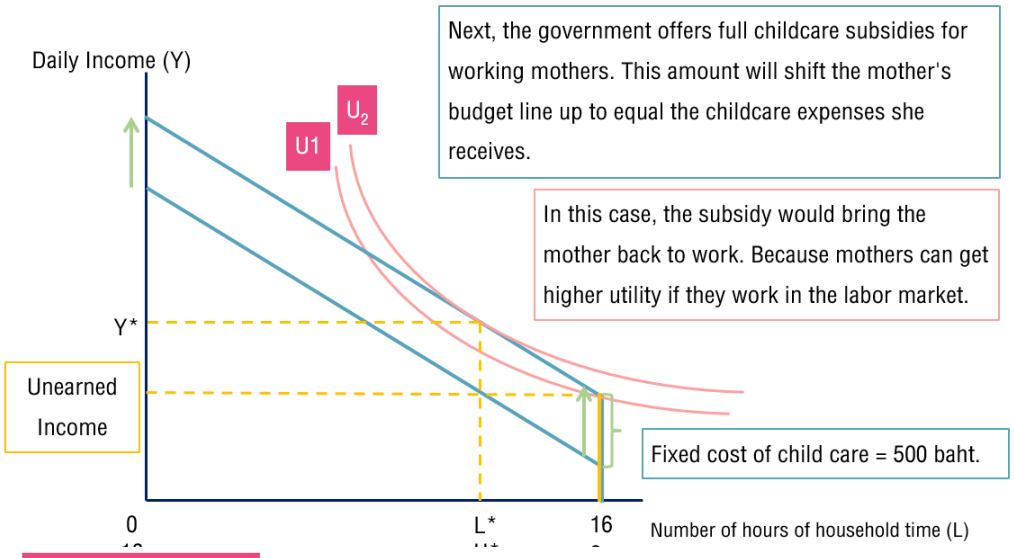
leave them at childcare centers. What factors influenced your decision to go to work if you have children at home? Out-of-home childcare expenses, quality of caregivers (grandparents or nanny), income from working in the labor market.

Example - The government provides childcare subsidies. Assume childcare costs are 500 baht per day for full-time childcare at daycare. Households will have two options: (i) working and paying for childcare; or (ii) stay at home and take care of the child by yourself. The answer depends on your spouse's wages in the labor market and your spouse's preferences. Furthermore, the childcare provided by the state (government) will also determine the spouse's decision.

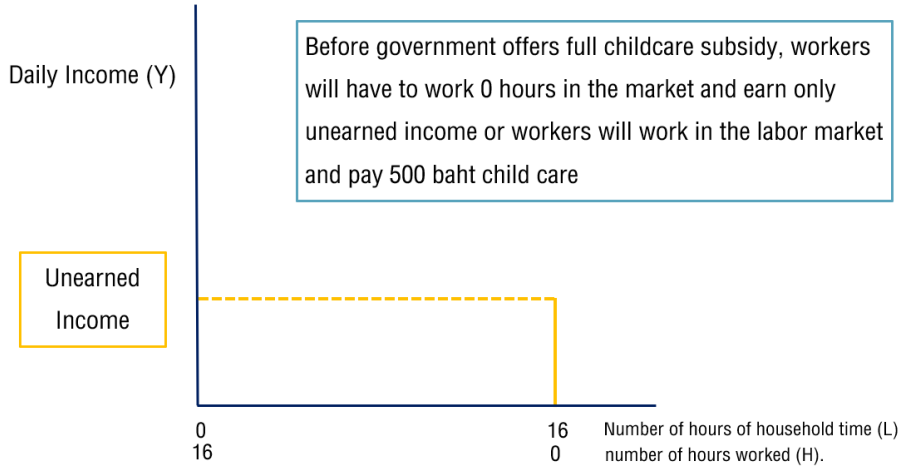
Case 1 - Initially, workers stay home and take care of the children themselves. After there is a subsidy provided by state (government), workers will return to the labor market due to higher utility (U1->U2) (Figure 4.9).

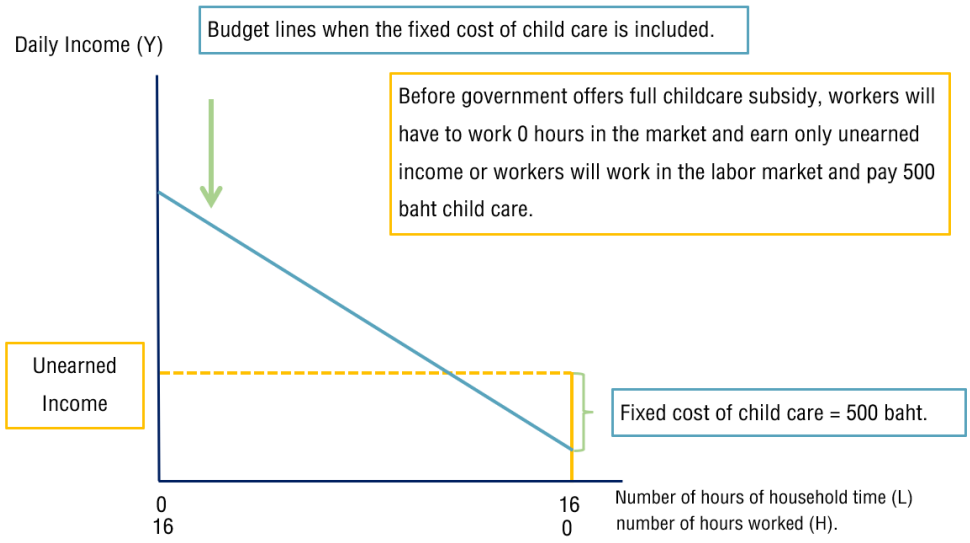
Figure 4.9 – Case 1 – Initially, workers stay home and take care of the children themselves

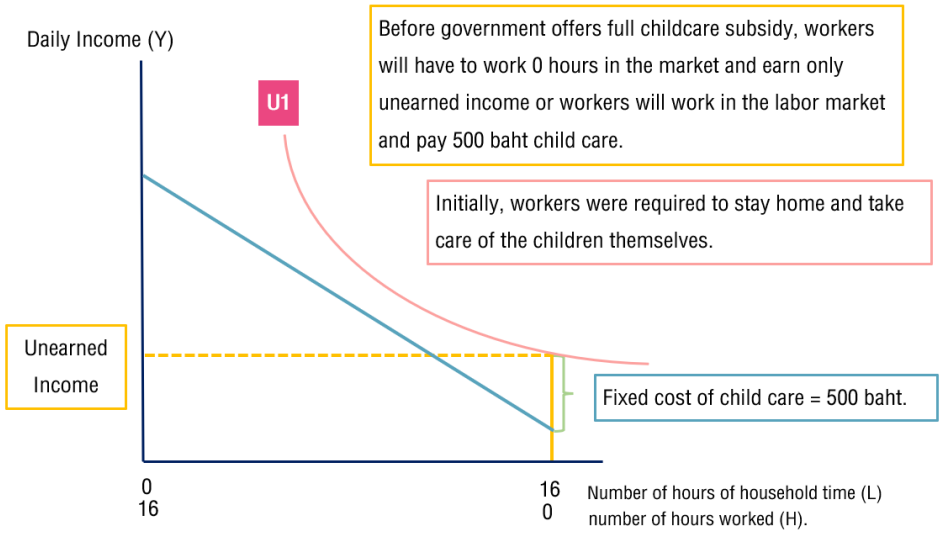


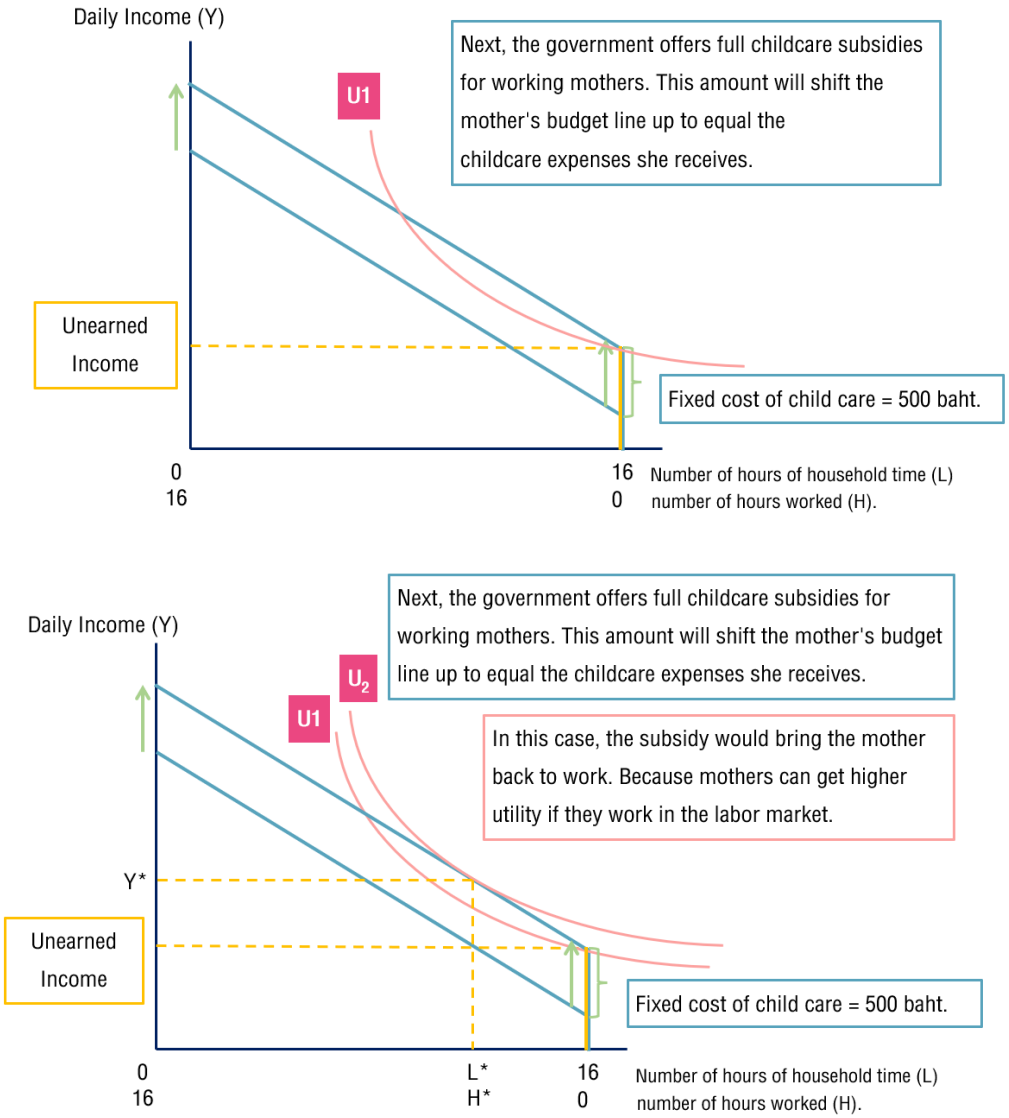

Daily Income (Y)
U2
U1
Next, the government offers full childcare subsidies for working mothers. This amount will shift the mother's budget line up to equal the childcare expenses she receives.
In this case, the subsidy would bring the mother back to work. Because mothers can get higher utility if they work in the labor market.
Y*
Unearned Income
Fixed cost of child care = 500 baht.
0
L*
16
Number of hours of household time (L)

STEP BY STEP


Daily Income (Y)
Before government offers full childcare subsidy, workers will have to work 0 hours in the market and earn only unearned income or workers will work in the labor market and pay 500 baht child care
Unearned Income
0
16
16
0
Number of hours of household time (L)
number of hours worked (H).


Daily Income (Y)
Budget lines when the fixed cost of child care is included.
Before government offers full childcare subsidy, workers will have to work 0 hours in the market and earn only unearned income or workers will work in the labor market and pay 500 baht child care.
Unearned Income
Fixed cost of child care = 500 baht.
0
16
16
0
Number of hours of household time (L)
number of hours worked (H).

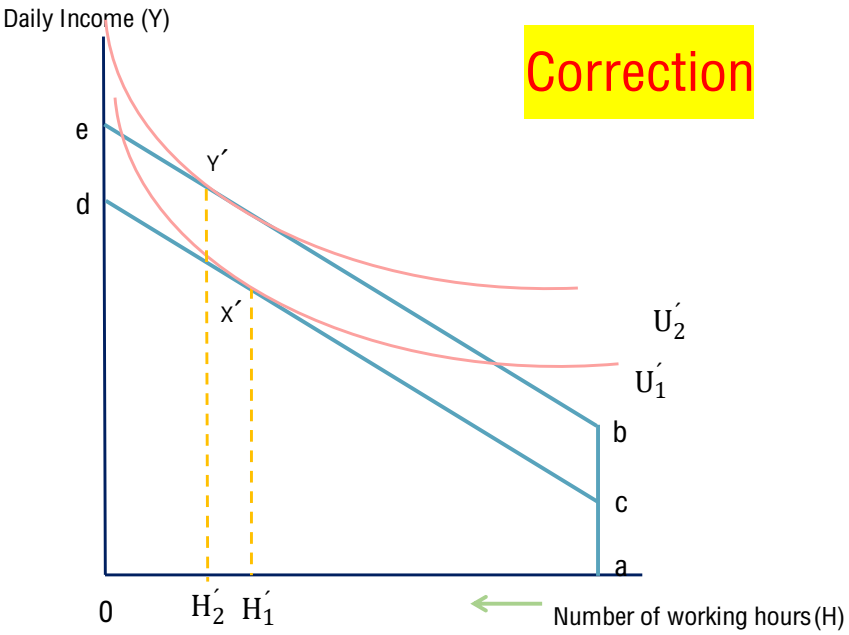

Daily Income (Y)
U1
Before government offers full childcare subsidy, workers will have to work 0 hours in the market and earn only unearned income or workers will work in the labor market and pay 500 baht child care.
Initially, workers were required to stay home and take care of the children themselves.
Unearned Income
Fixed cost of child care = 500 baht.
0
16
16
0
Number of hours of household time (L)
number of hours worked (H).



Case 2 - Initially, workers were both working in labor market and taking care of children in home.

After there is a subsidy provided by state (government), workers will reduce their working hours. Increase household hours (H1->H2), get higher utility (U1->U2) (Figure 4.10).

Figure 4.10 – Case 2 - Initially, workers were both working in labor market and taking care of children in home.


Daily Income (Y)
Correction
e
d
Y´
X´
U´2
U´1
b
c
a
0
H´2
H´1
Number of working hours (H)

Exercise

1) From the production table of Mr. Somchai and Mrs. Somying, who has an absolute and comparative advantage in working outside the labor market? (assuming that Mr Somchai and Mr Somying work in labor market and/or outside labor market 8 hours a day). Next, draw the production possibilities frontier (PPF) before and after the marriage of Mr. Somchai and Mrs. Somying. If Mr. Somchai and Mrs. Somying had similar preferences regarding in and outside the labor market, who should work in or outside it?

2) Based on (1), use a joint PPF and indifference curve (IC) to analyze the points of joint production and consumption of Mr. Somchai and Mrs. Somying. If both are still working in the labor market, calculate the total productivity in this case. In addition, should both be in the labor market? Or should one work in the labor market and another at home? Why? Explain your answer.

3) From the labor-leisure decision model, the IC shows the order of preference of each worker. The workers prefer work and leisure. Describe the properties of this IC line, and draw IC lines along with a description of each feature.

4) Use basic economic principles to analyze the characteristics of the IC for the labor-leisure decision model. Why? If the IC curve is a flat line (flat–less steep), this worker has a preference for production in the labor market. However, but if the IC line is steep (steep–very steep), this worker has a propensity to produce outside the labor market (within the household).

5) Based on the labor-leisure decision model, draw the budget constraint of a worker if the hourly wage is 20 baht. Mr. A, who likes to work a lot, works 12 hours per day. Calculate his earnings. Then, use an IC curve to analyze the appropriate points of the composition between work and leisure at which this worker can achieve maximum utility. Please draw a graph accompanied by an explanation.

6) Using a household production analysis model, please draw a graph accompanied with an explanation of your analysis of Mrs. B's working behavior inside and outside the labor market before and after she received a government subsidy for childcare of 300 baht per day in the following two cases:

(a) Mrs. B stayed at home and raised her children, and Mr. A, her husband, gave her 500 baht a day to spend.

(b) Initially, Mrs. B works both inside and outside the home and is paid 20 baht per hour.

7) Do you agree with this sentence: "If the husband receives a wage increase, the wife tends to work less. However, if she earns more, she tends to work more." Use basic economic theories to discuss this woman's behavior.

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