

Continued



## Chapter 4

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

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# Criticism of the labor-leisure choice model

- ⬡ This model does not consider non-market production.
- ⬡ It is based on the decisions of male workers because they were the main labor force during the modeling period in the 1950s and 1960s.
- ⬡ In this model, there are only two activities for people to choose:  
work and leisure
- ⬡ The assumption is that when you are not working, you are resting.  
However, if you are not working, you are engaging in household production.
- ⬡ Instead of modeling a labor-leisure tradeoff, we can now model a  
labor-household time tradeoff

# Household and family production



## Rest time vs household time



- 🏠 In the previous section, we assumed that labor has two activities :  
work and leisure
- 🏠 In reality, workers do not spend all their time on resting, but spend most of their time in the household production (cooking, cleaning, child-rearing)

Household Time and Household Production

# Labor – household time **decision model**

## Definition:

**Household time** – Household production and leisure.

**Household production** – preparing food, taking care of children, cleaning the house, etc.



- Most people do not think household production activities as leisure activities, so we need to include these household production activities in the model.
- Instead of the labor-leisure tradeoff, we can model the labor-household time tradeoff

Decision making between work in labor market (labor) and household time

# Assumptions

- 📍 Budget constraints remain the same as the previous model. However, **unearned income** is added to the model.
  - A woman does not work outside home (work only within household), she earns income 0 (zero) baht
  - Her husband gave this woman 20 baht a day (**her unearned income = 20 baht**)
  - Women's budget line is raised by 20 baht (even if working in the labor market = 0 hours).
- 📍 Indifference Curves (IC) show preferences for leisure activities and household activities

However, properties of the IC lines remain the same.

# Properties of IC

🛡️ Flat IC - Workers tend to focus more on working in the labor market than in household.

- **For example:** “Workaholics” tend to have relatively flat IC lines.

🛡️ Steep IC - Workers tend to prefer household chores and leisure rather than working in the labor market.

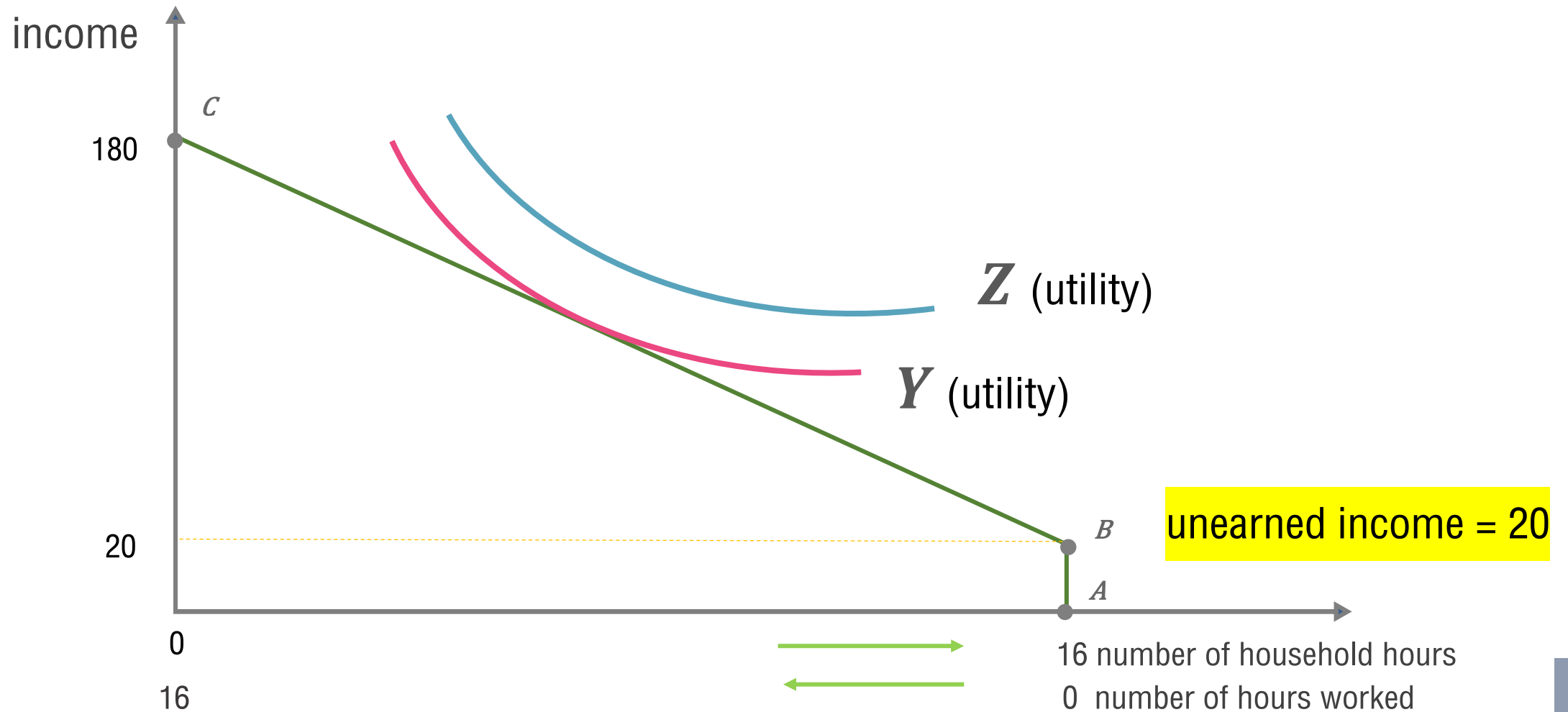
- **For example:** Stay-at-home mothers who like to work at home, take care of the house, and raise children tend to have steep IC lines.



# Properties of IC

- ⬡ 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 (or goes to school)
  - 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.

# Choosing between working time and household time



## Intra-household resource allocation

- 🍯 Decisions on shared work within the household.
- 🍯 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 in this allocation.

# (1) Unitary preference model

## Assumptions:

- ⬡ A household consists of two people: husband and wife.
- ⬡ Both husbands and wives have the same preferences (the same utility function)

⬡ One person generally makes decisions about work in the labor market and household consumption.

This person's decision affect the whole household's utility.

**Advantages** - single utility function makes it easier for households to achieve maximum utility.

**Disadvantage** - same utility/preferences is not based on reality

## (2) Intra-household bargaining models



### Assumptions:

- ⬡ 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.

a woman is **employed**

a woman is **unemployed**

## (2) Intra-household bargaining models

Threat to divorce—leave marital status - is a key factor in this model.

- ⬡ 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

- 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.

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

Question: Who should be at home to raise children? There are two options:

- Who is more productive at home?
- Who has higher productivity in the labor market?

The opportunity cost of staying at home is wages.

- Couples must balance the wages lost from having one person stay home to take care of the children – Aim to achieve maximum household utility?

Decision on labor supply - Depends on spouse's preferences and bargaining power.

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

🍯 In the past, women are at home with the children. 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.

🍯 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).



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

- 🏠 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; women in non-market work.

Nowadays, Thai women work both inside and outside the home.

Participation rate in the labor market is very high for married women (Liao and Paweenawat, 2021).

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



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 household

The theory does not indicate the direction of final outcome of the husband's labor supply.

Depend on Negotiation in the household – Preferences and Bargaining power

## Household and family production: **Raising children**

One of the highest costs and burdens of family production is childcare.

- Childcare: homecare (father or mother stays home to care for the children)
- Hire someone (nanny) or leave them at childcare centers.

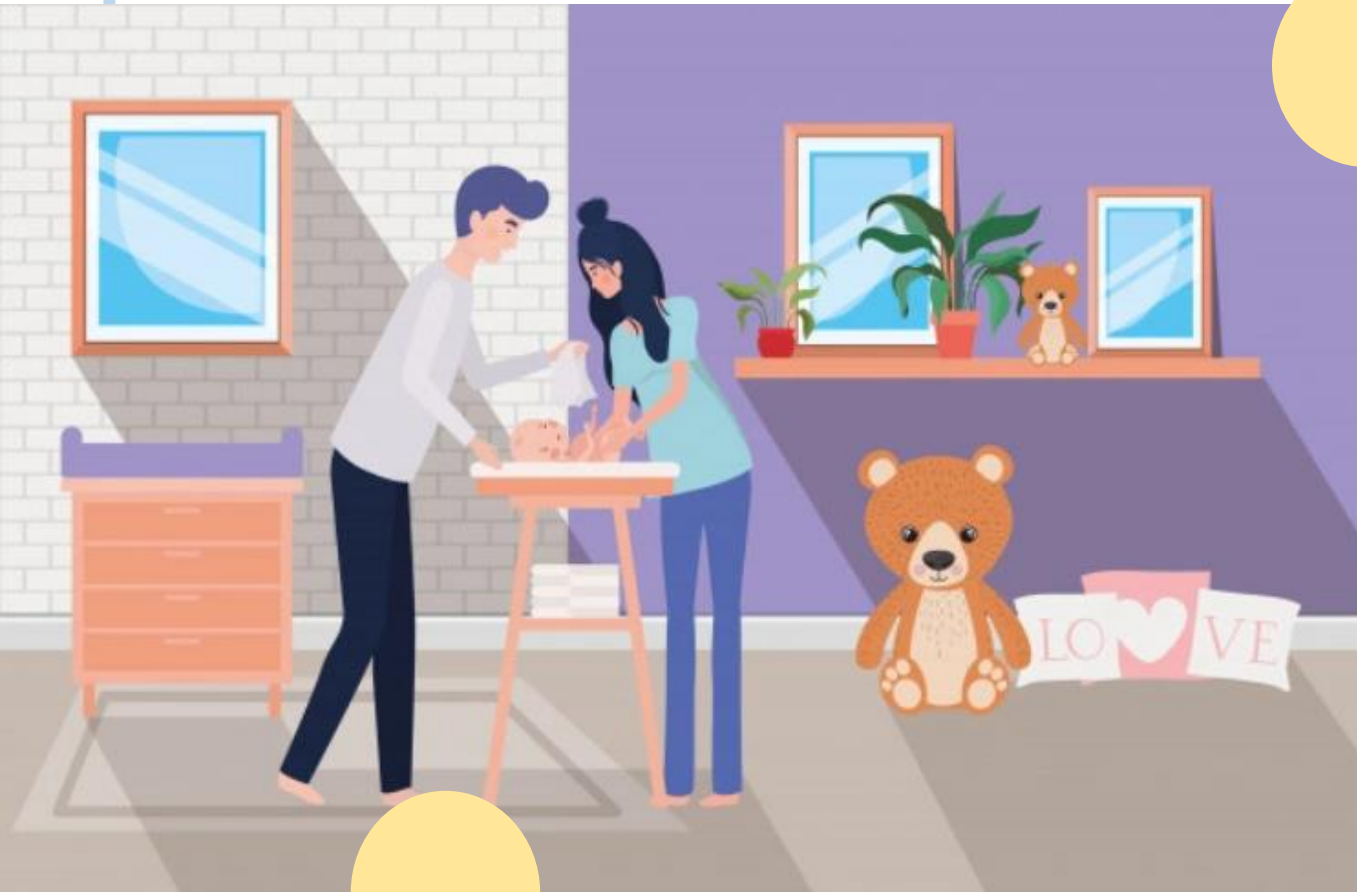
What factors influenced your decision to go to work if you have children at home?

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 child care at daycare.
- Households will have two options:
  - (1) working and paying for child care; or
  - (2) Stay at home and take care of the child by yourself.
- The answer depends on spouse's wages in labor market and spouse's preferences.



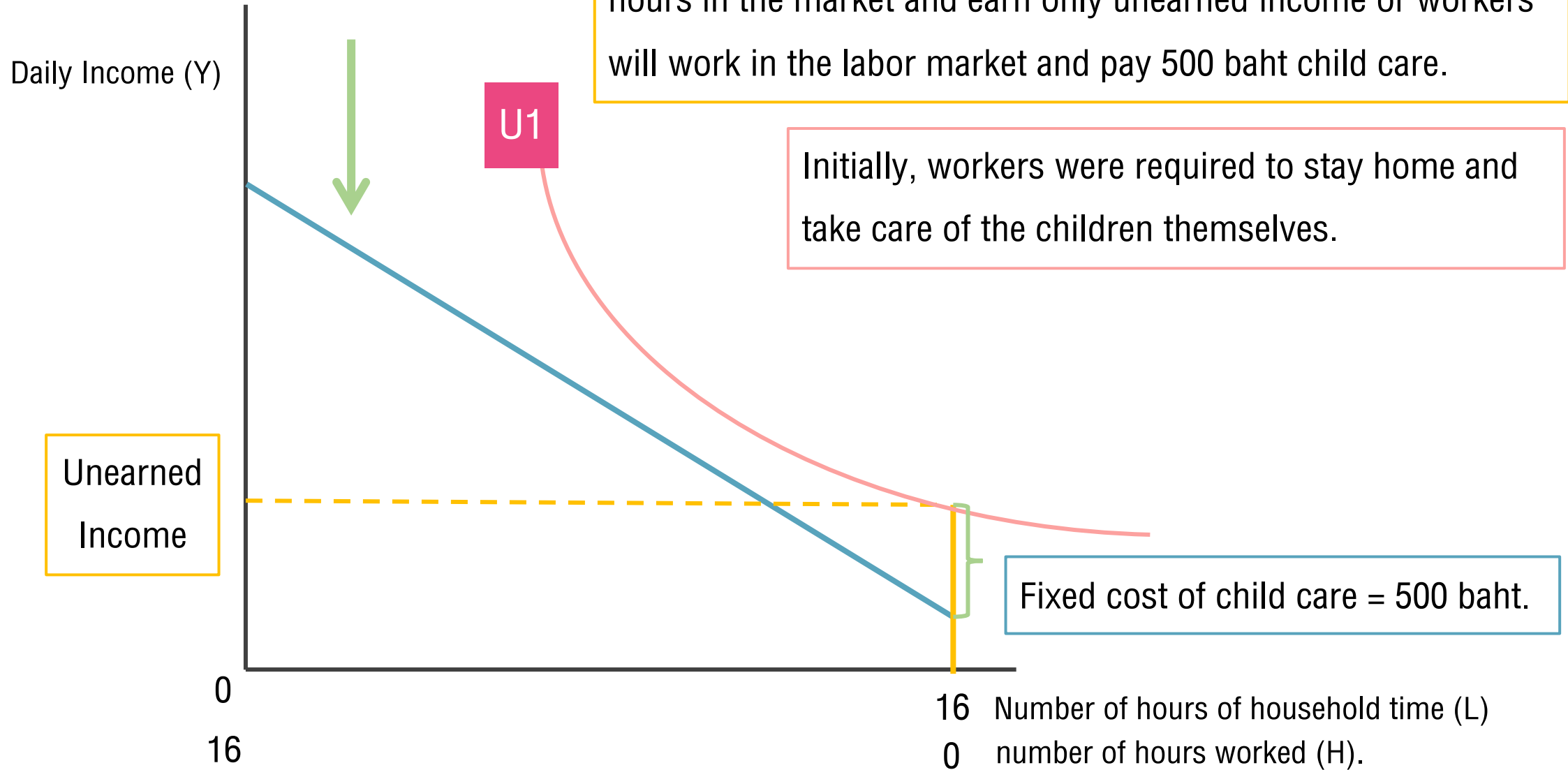
## Case 1

Initially, workers stay home and take care of the children themselves.

Budget lines when the fixed cost of child care is included.

Before the state child care 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.



Daily Income (Y)



$Y^*$

Unearned  
Income

0  
16

$U_1$   
 $U_2$

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.

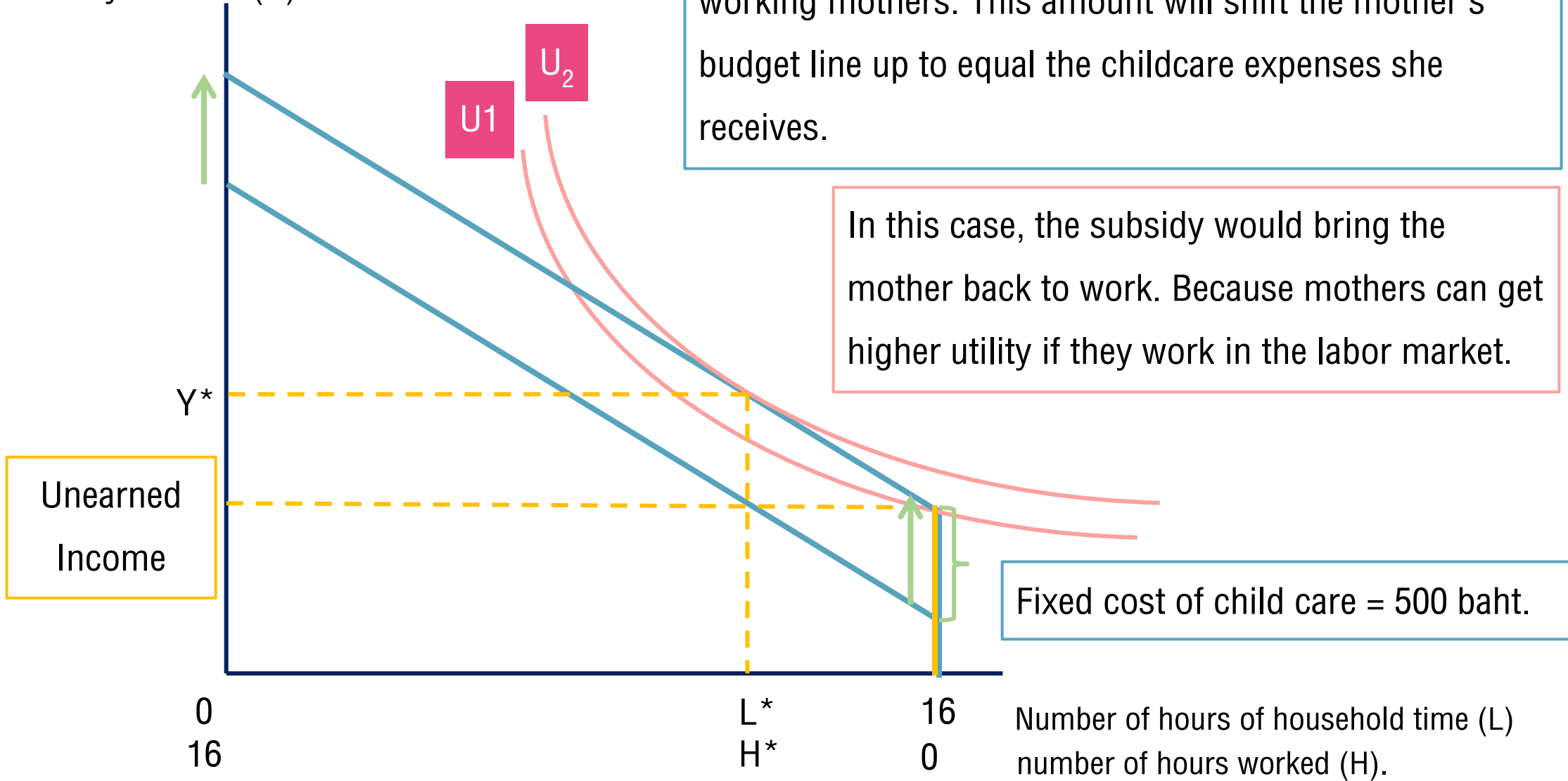
In this case, the subsidy would bring the mother back to work. Because mothers can get higher utility if they work in the labor market.

Fixed cost of child care = 500 baht.

$L^*$   
 $H^*$

16  
0

Number of hours of household time (L)  
number of hours worked (H).



## STEP BY STEP

Daily Income (Y)

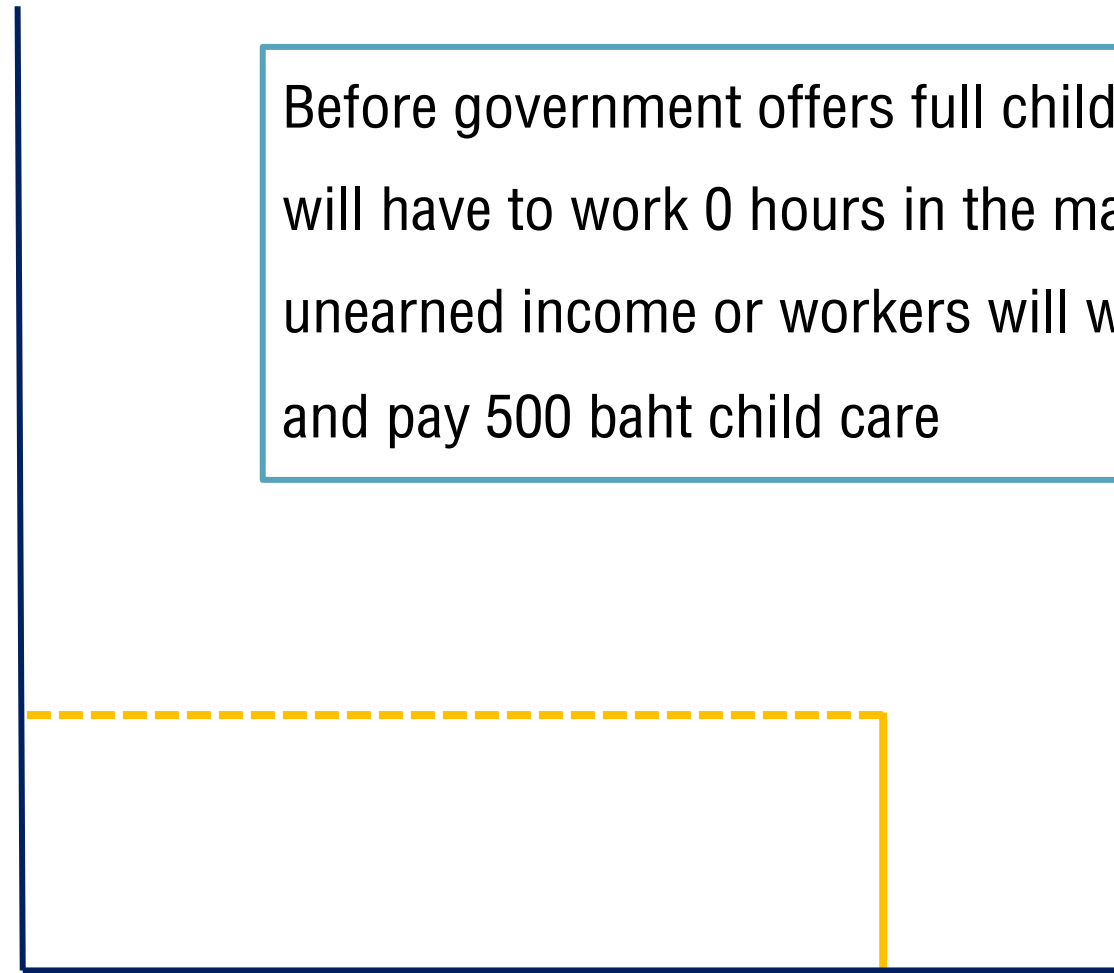
Unearned  
Income

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0  
16

16  
0

Number of hours of household time (L)  
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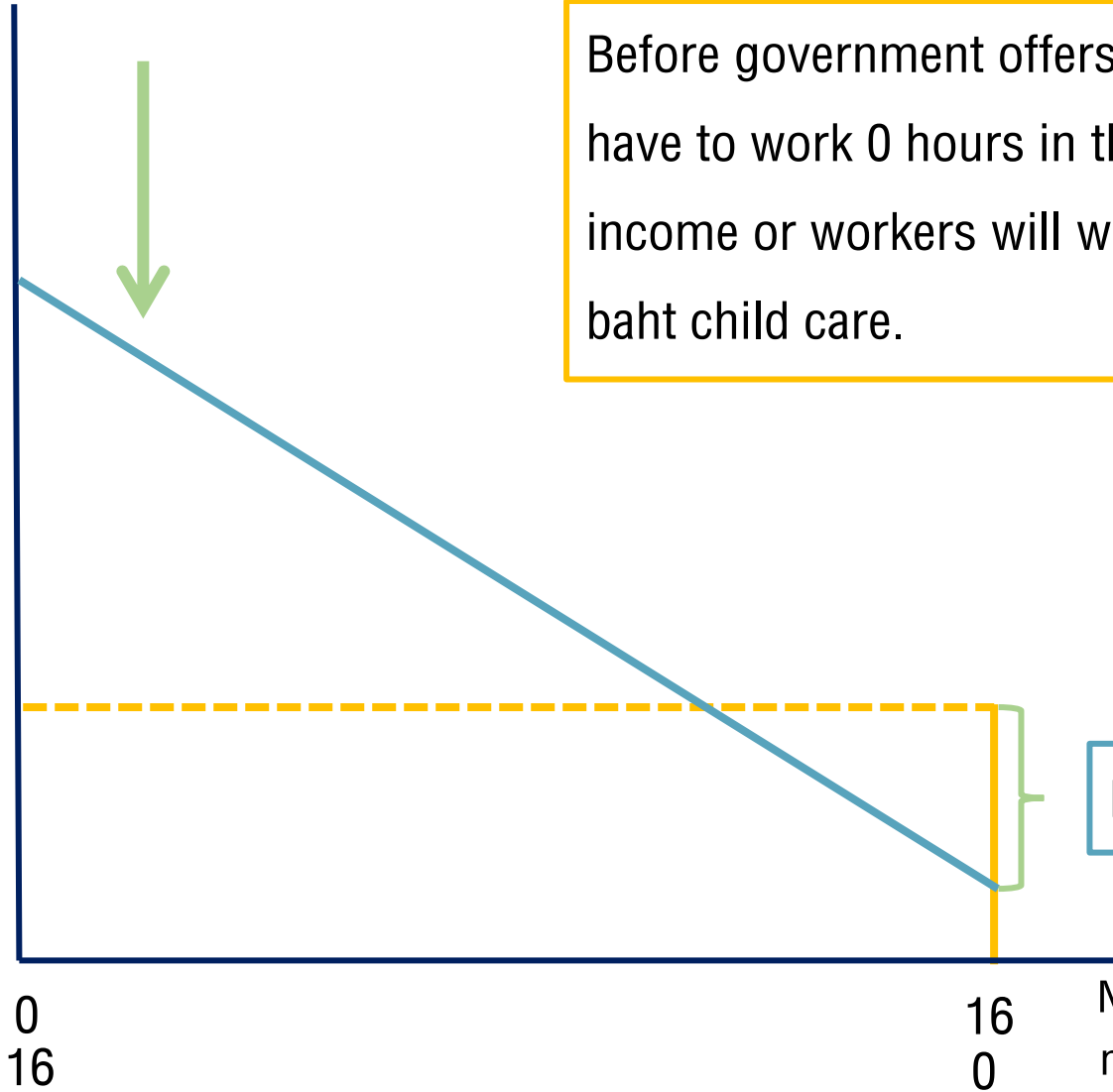
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Income

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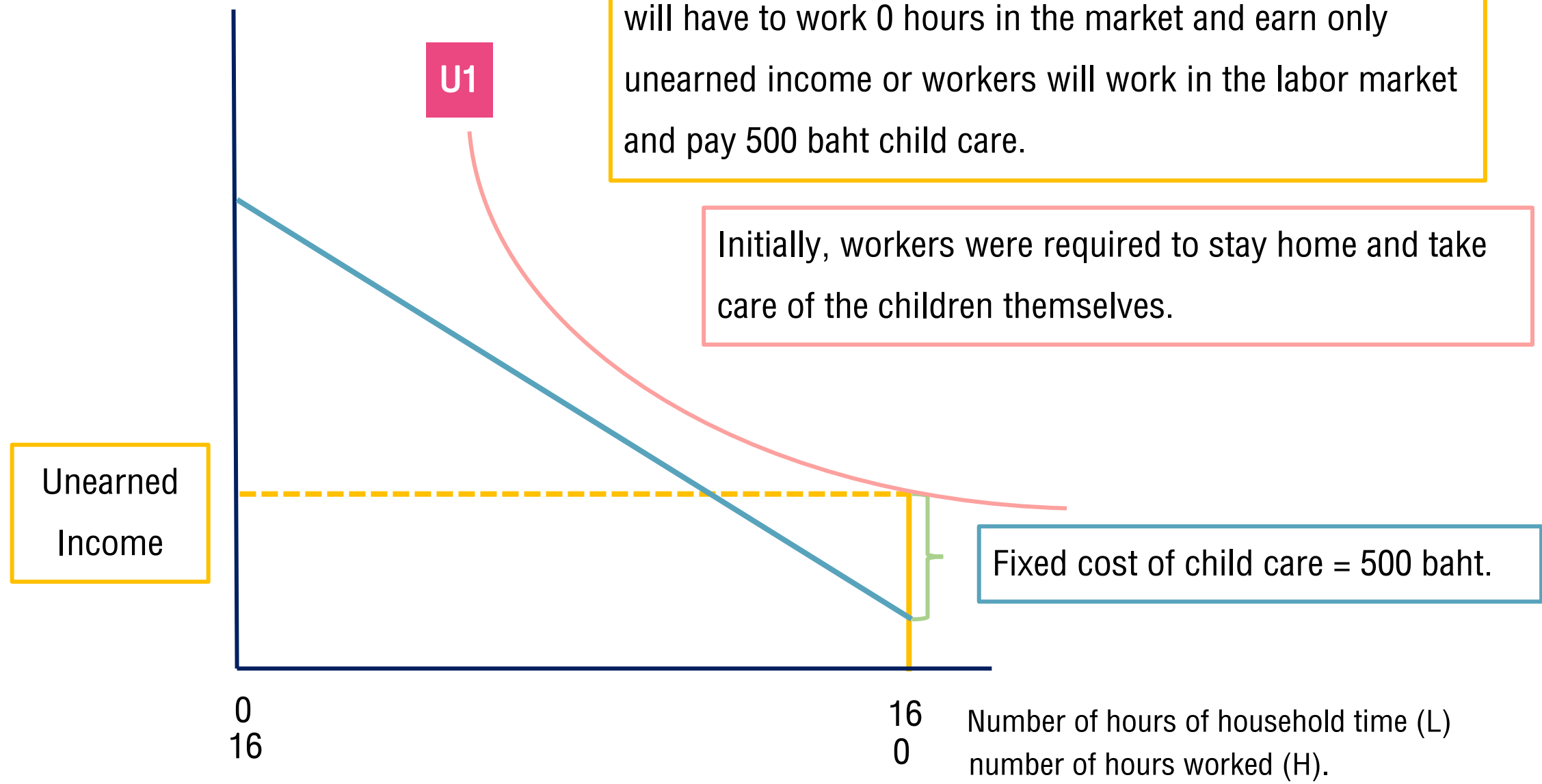


0  
16

16  
0

Number of hours of household time (L)  
number of hours worked (H).

Daily Income (Y)



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Initially, workers were required to stay home and take care of the children themselves.

Daily Income (Y)

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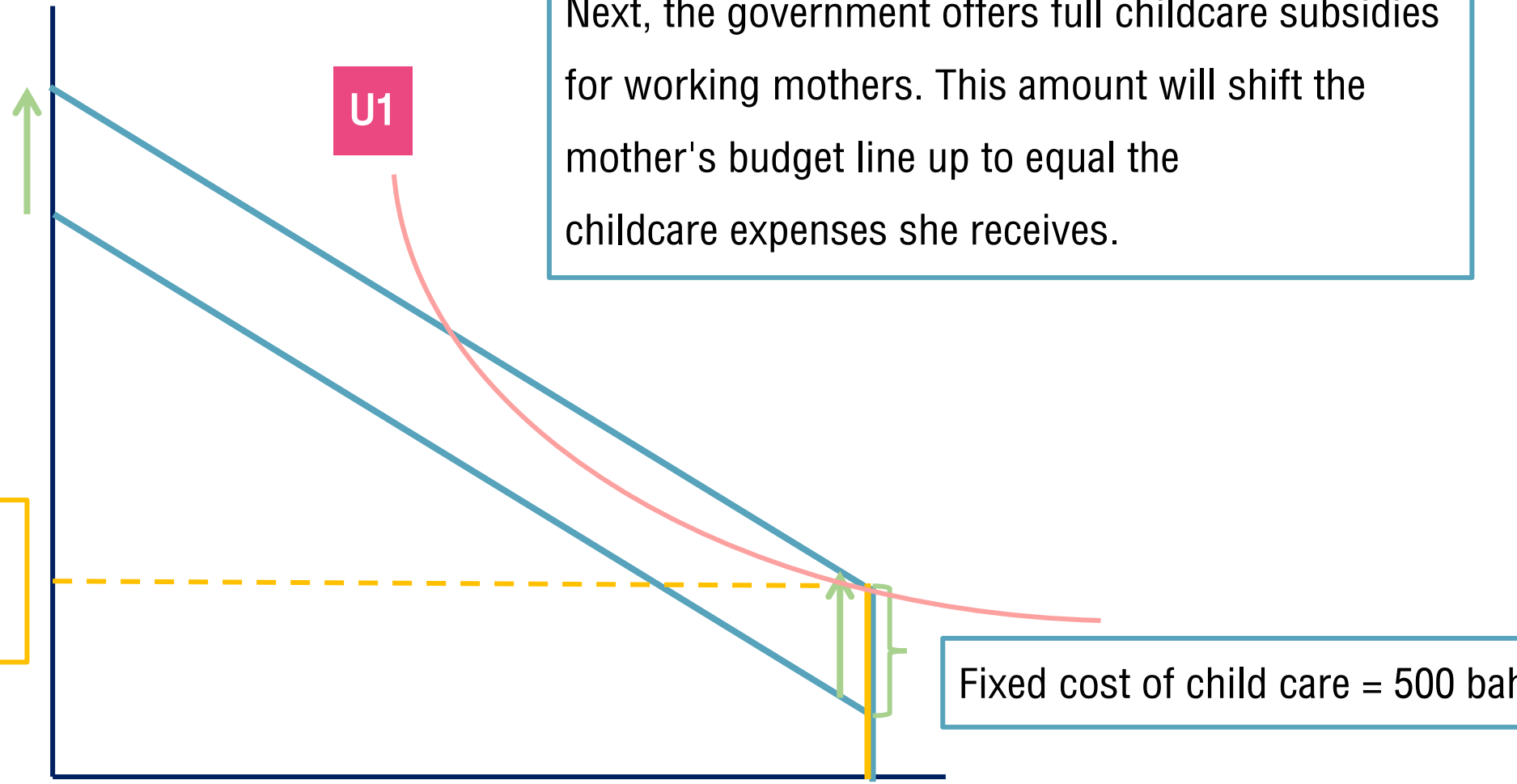
U1

Unearned Income

Fixed cost of child care = 500 baht.

0  
16

16 Number of hours of household time (L)  
0 number of hours worked (H).



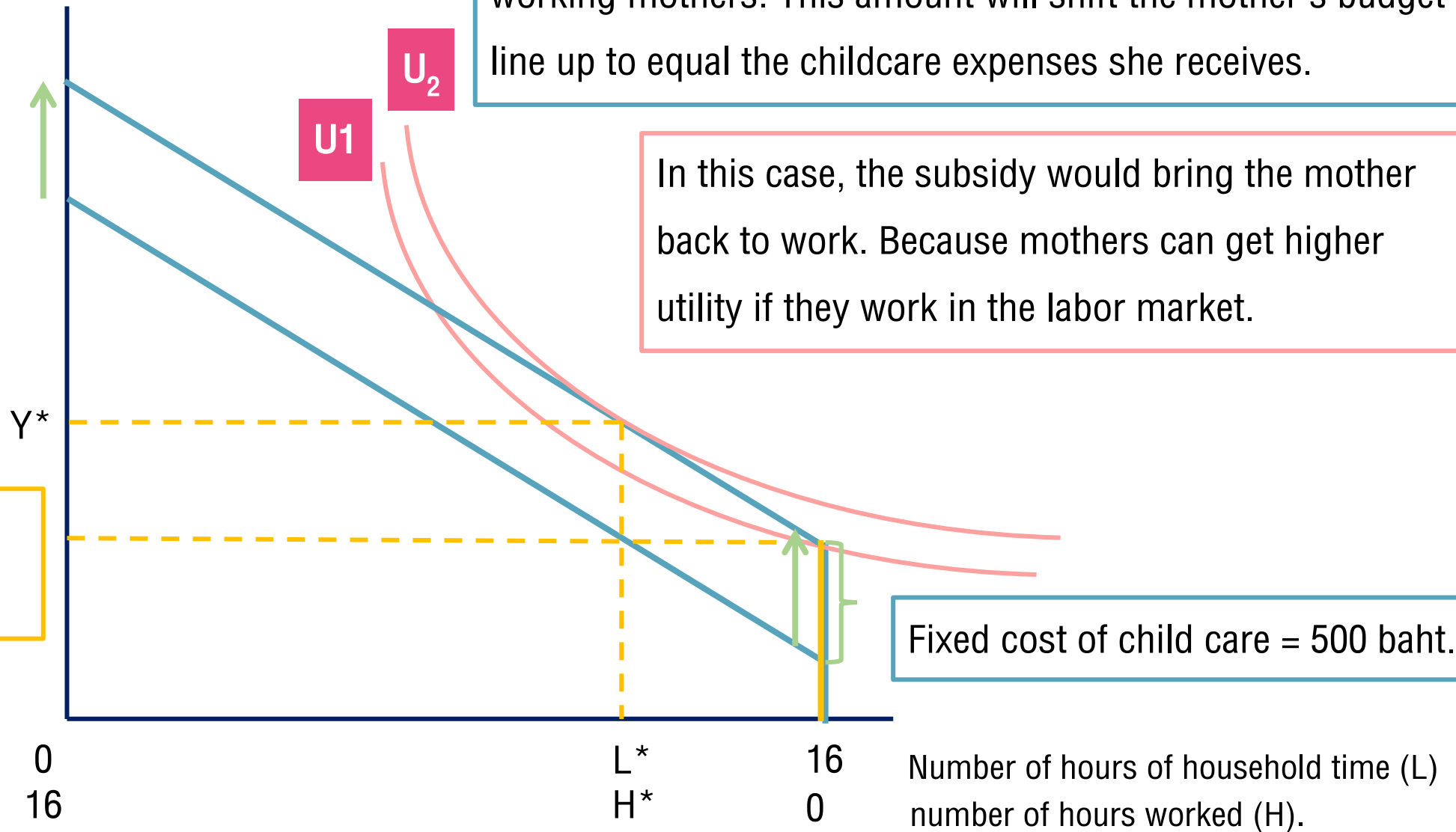
Daily Income (Y)

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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.

Fixed cost of child care = 500 baht.

Unearned  
Income



0  
16

$L^*$   
 $H^*$

16  
0

Number of hours of household time (L)  
number of hours worked (H).

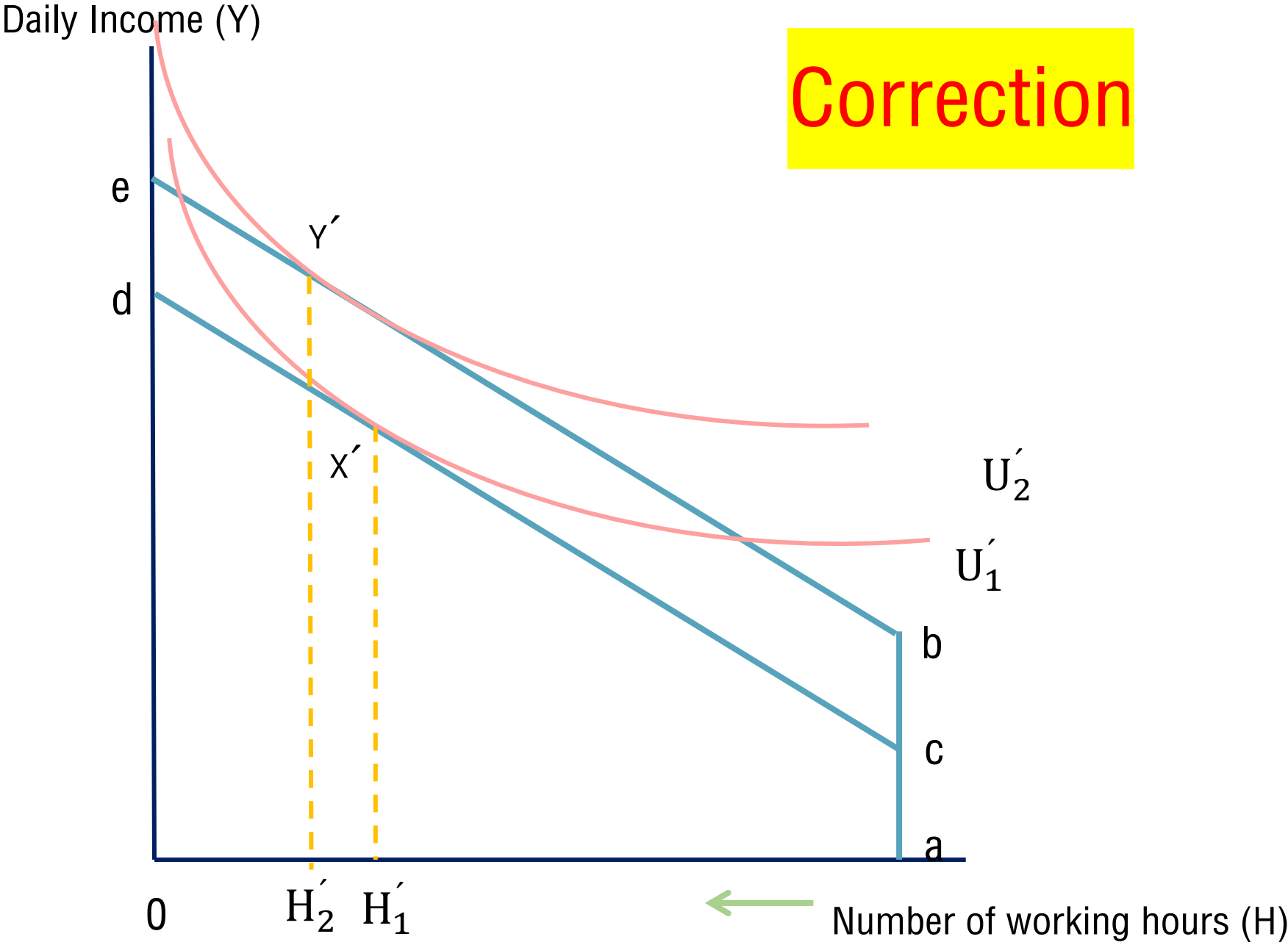


## Case 2

-Initially, workers were both working in labor market and taking care of children



# Correction



# 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?

Productivity (unit/hour)		
	labor market	non-labor (household)
Mr. Somchai	3	8
Mrs. Somying	5	5

# Exercise

- 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 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).

# Exercise

- 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.