

Labor Supply 4

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Labor & Personnel Economics

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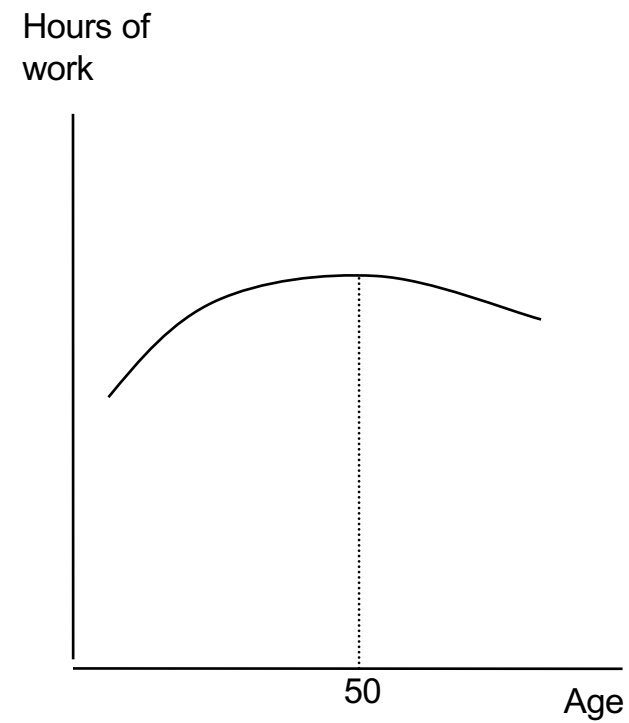
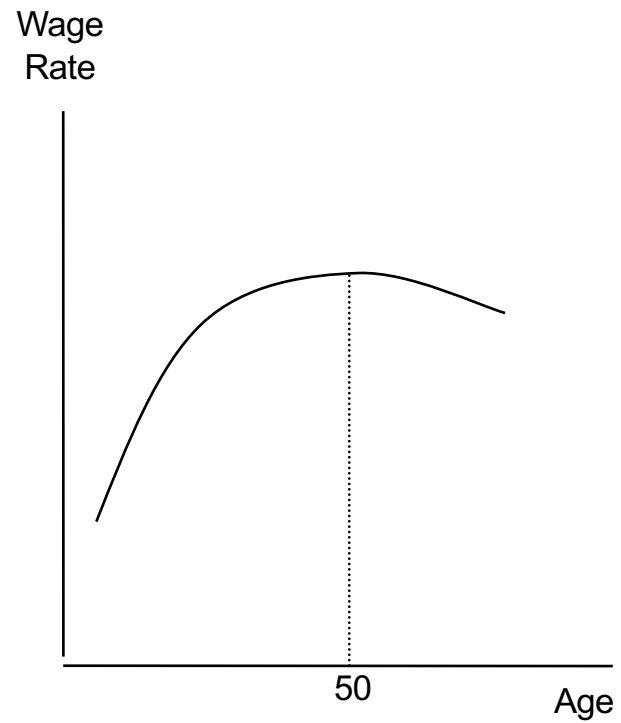
Labor Supply over the Life Cycle

- Wage rates change over the worker's life (over the life cycle).
 - Wages are low when young (no experience).
 - Wages rise with time and peak around 50.
 - Wages decline (obsolescence) or remain stable (sticky) after 50.
- The changes in wages over the life cycle are “evolutionary” wage changes that alter the price of leisure.

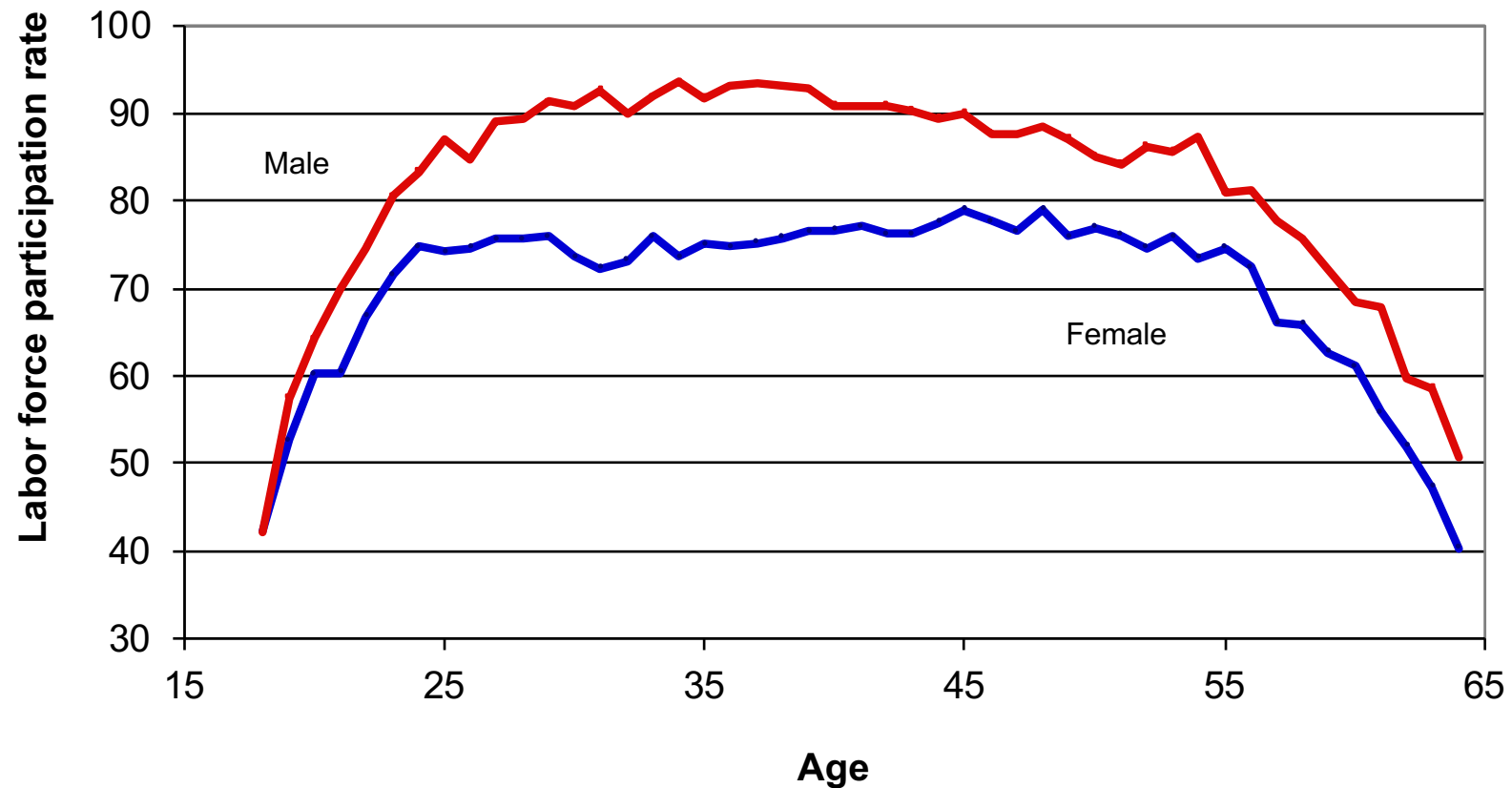
Theoretical Issues of Evolutionary Wages

- A person will work more hours when wages are higher (i.e., the substitution effect tends to dominate the income effect).
- So, the profile of hours of work over the life cycle will have the same shape as the age-earnings profile.
- **Intertemporal substitution hypothesis:** people substitute their time over the life cycle to take advantages of changes in the price of leisure.

The Life Cycle Path of Wages and Hours



Labor Force Participation Rates over the Life Cycle in 2010



Retirement

- Lifetime income is higher the longer a worker postpones retirement (as pension benefits are usually constant and lower).

According to standard labor supply theory:

- An increase in pension benefits reduces the price of retirement, increasing the demand for leisure and encouraging the worker to retire earlier.

Krueger and Pischke (1992)

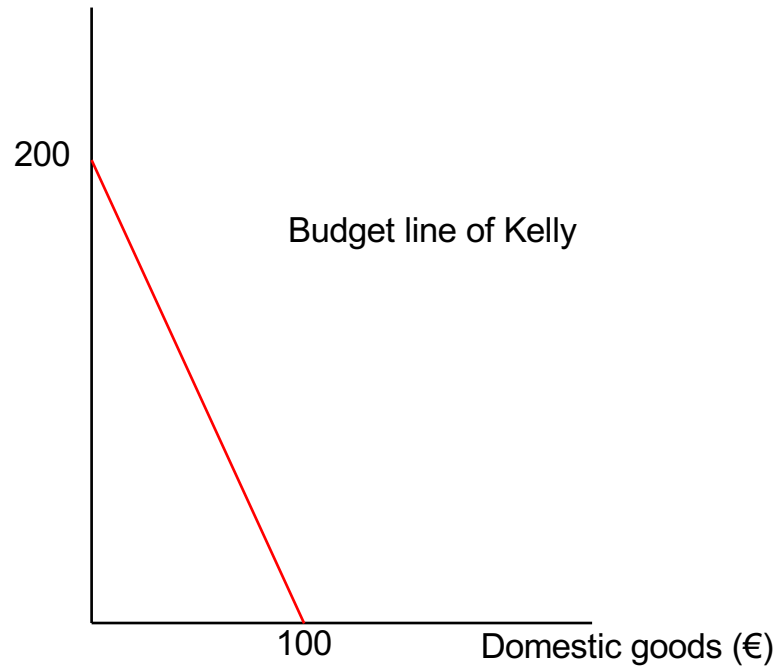
Economics of the Family

- Working time also includes housework.
- Why do some family members specialize in housework?
 - Comparative advantages / more able

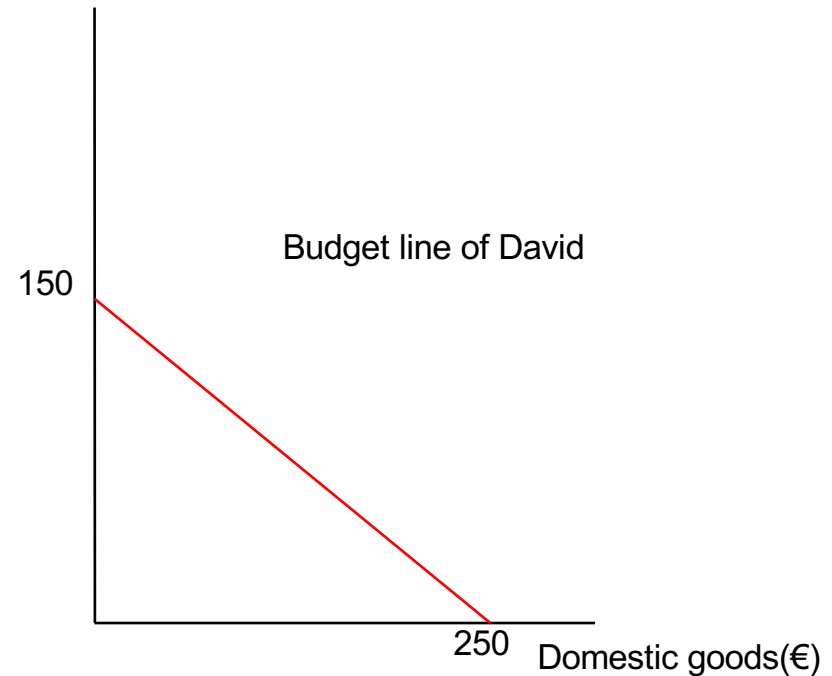
In the case of a “unitary family model”, the frontier of opportunities of a couple is greater than the sum of the two individuals: each individual can specialize in the sector where he/she is more productive

Frontier of opportunities of a single

Market goods (€)

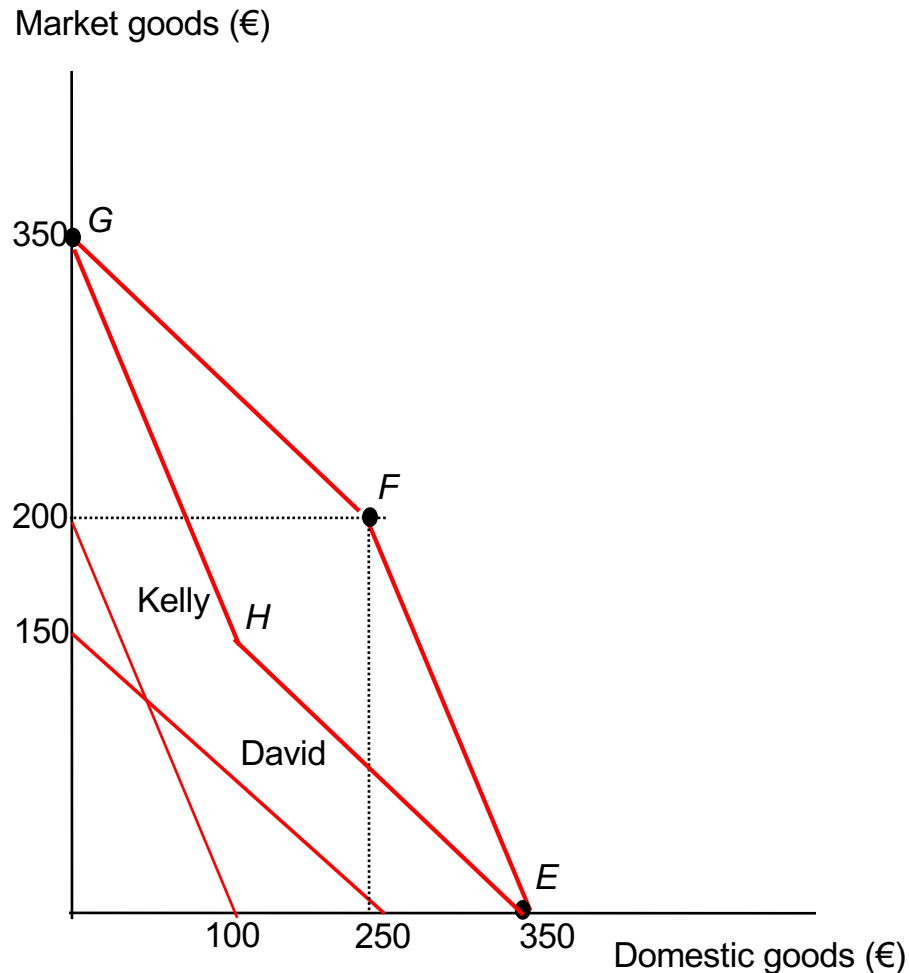


Market goods (€)



Kelly is more productive than David on the market (the slope of the possibility frontier is the ratio between the productivity in the market and at home)

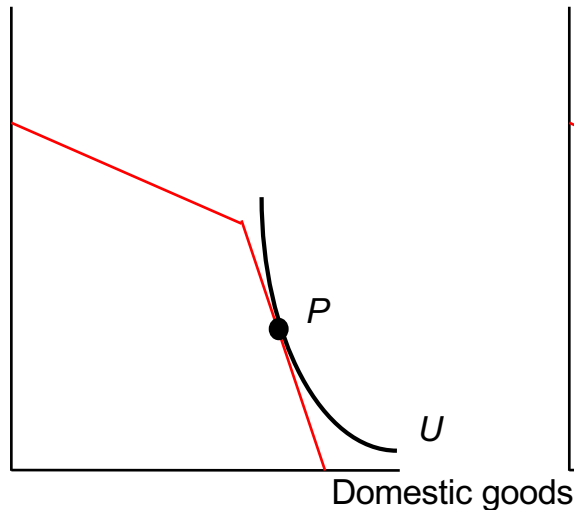
Frontier of opportunities of a couple



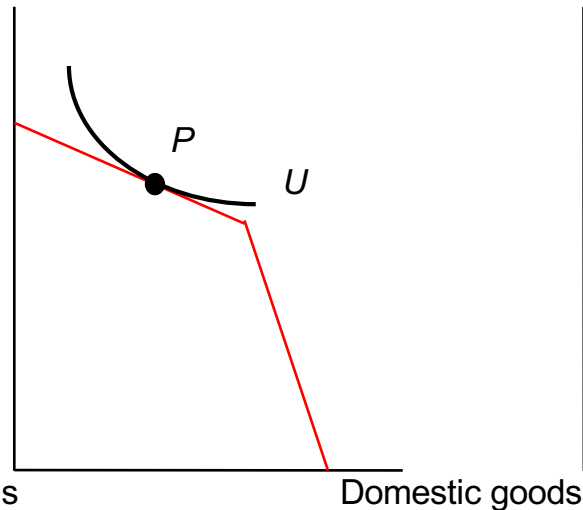
In point *E*, David and Kelly allocate all their time to housework. If they want to buy some market goods, Kelly will look for a job because she is the most productive in the market (the possibility frontier *FE* is higher than *HE*). After finishing her time, also David will look for a job (*GF*). Similar to Ricardo's "Law of comparative advantages"

Who does work, and where?

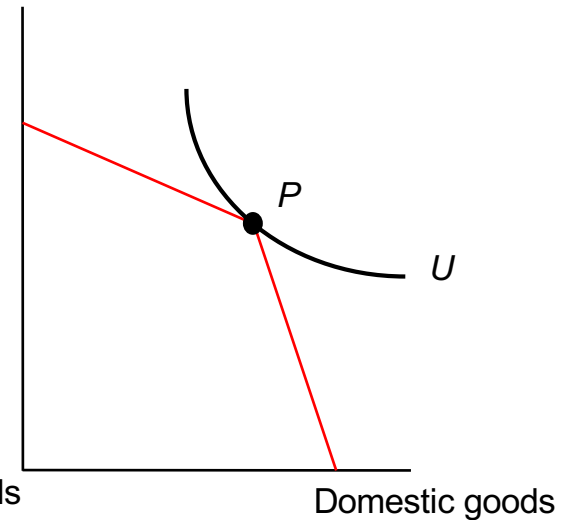
Market goods



Market goods



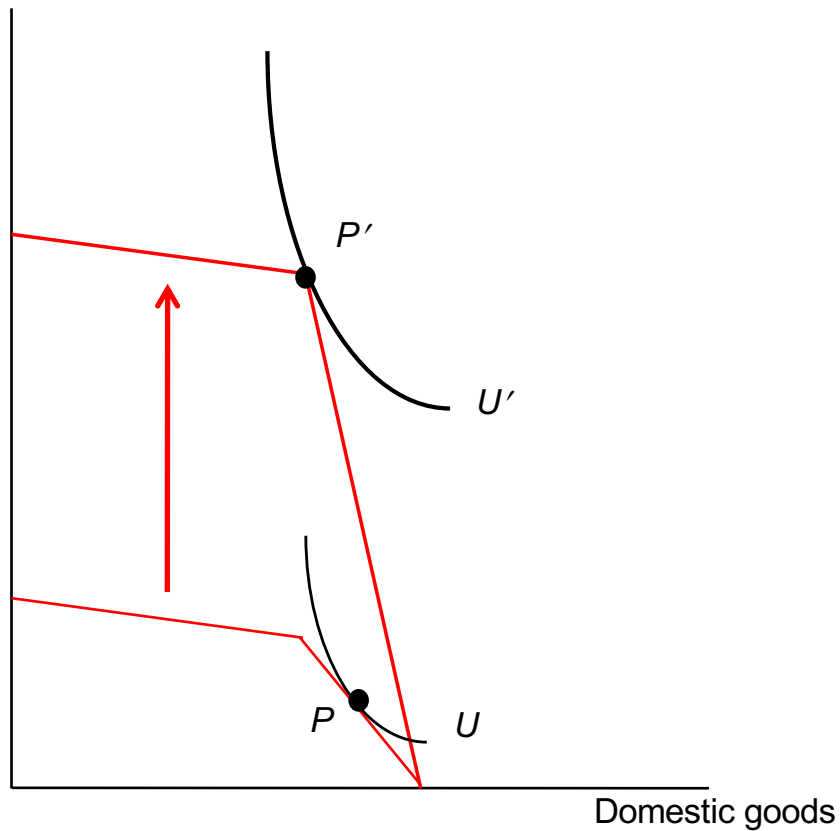
Market goods



The final decision depends on the couple's preferences for market and domestic goods (steeper indifference curves represent higher preferences for domestic goods)

An increase in Kelly's salary

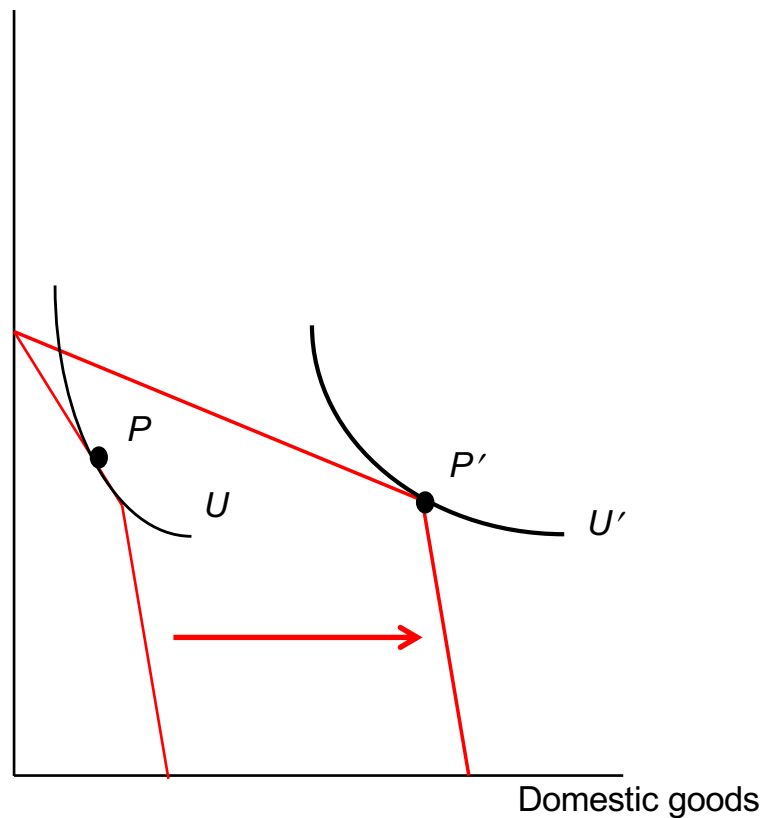
Market goods



An increase in Kelly's salary moves the couple's choice from point P to point P' , and now Kelly specializes completely in the market

An increase in David's home productivity

Market goods



An increase in David's marginal productivity at home moves the couple's choice from point P to point P' , and now David specializes completely in housework