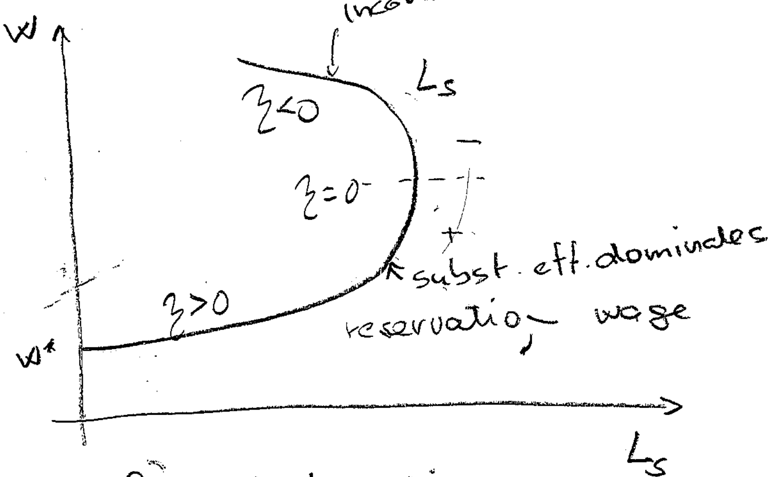
• LABOR SUPPLY CURVE

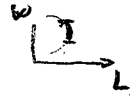



backward bending curve

$$\zeta_{LW} = \frac{\% \Delta L}{\% \Delta w} = \frac{\frac{\Delta L}{L}}{\frac{\Delta w}{w}} \gtrless 0$$

Labor supply elasticity

$\boxed{A}$ MEN –




$\boxed{B}$ WOMEN –


share of labor income

uncompensated effect

$$\boxed{\frac{\partial L}{\partial w} = \underbrace{\frac{\partial L^*}{\partial w}\Big|_{U=const}}_{comp} + L\frac{\partial L^*}{\partial I} \Rightarrow \underbrace{\frac{\partial L^*}{\partial w}\frac{w}{L^*}}_{} = \frac{\partial L'}{\partial w}\frac{w}{L^*}\Big|_{U=const} + \frac{wL^*}{I}\frac{\partial L^*}{\partial I}\cdot\frac{I}{L^*}}$$

$$\zeta^{TOT}_{L,w} = \zeta^{comp}_{L,w} + S_L * \zeta_{L,I}$$

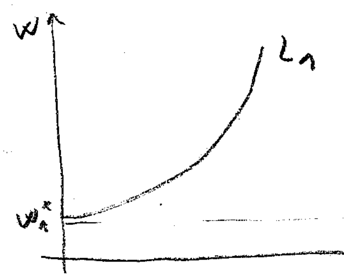
Slutsky eq.

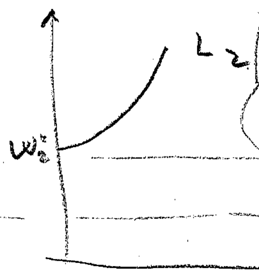
$I = wL$

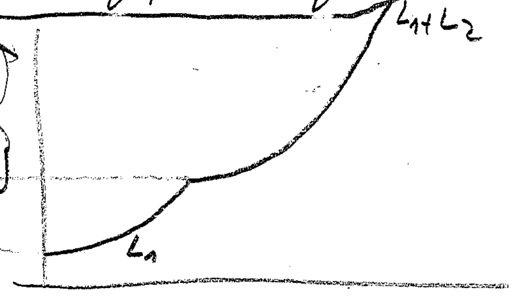
$dI = dw\,L$

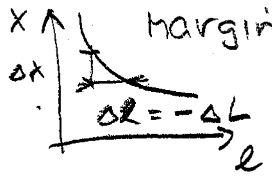
$\frac{\partial L^*}{\partial I}\cdot\frac{\partial I}{\partial w}$

• ADDING UP




marginal condition

One unit of time $\Delta t$

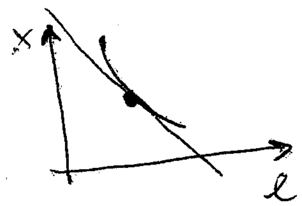
$\Delta l \Rightarrow \Delta U^l = \frac{\partial U}{\partial l}\Delta l$

$\Delta t \rightarrow \Delta L \Rightarrow \Delta U^L = \frac{\partial U}{\partial x}\Delta x$

where $\Delta x = w\Delta L$

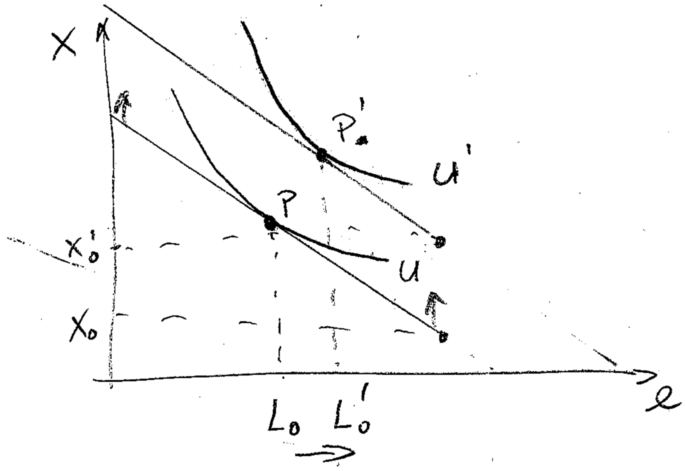
$\Delta U^l \overset{!}{=} \Delta U^L \Rightarrow \frac{\partial U}{\partial l}\cancel{\Delta l} = \frac{\partial U}{\partial x} w \cancel{\Delta L}$

Budget cond.




$x \leq Lw = (1-l)w$

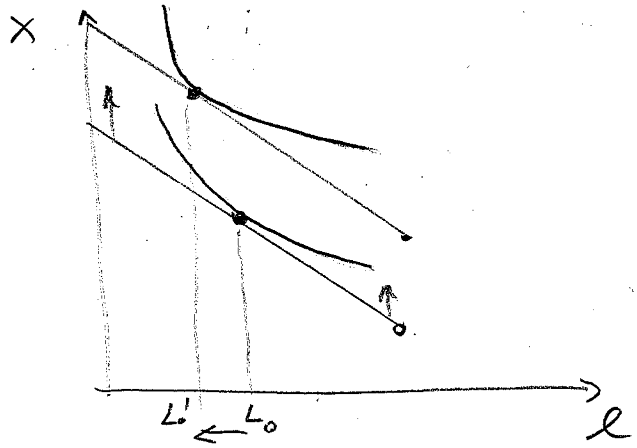
• IMPACT OF NON-LABOR INCOME $X_0$




leisure normal good

~~Ando~~

$$\left.\frac{\partial L}{\partial X_0}\right|_w < 0$$

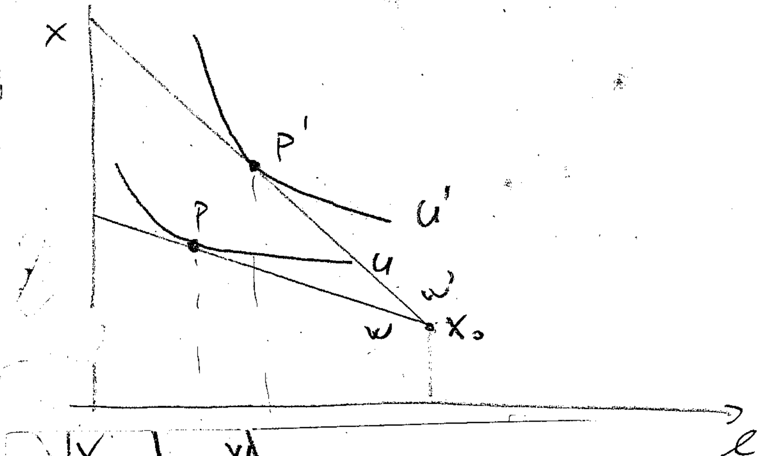


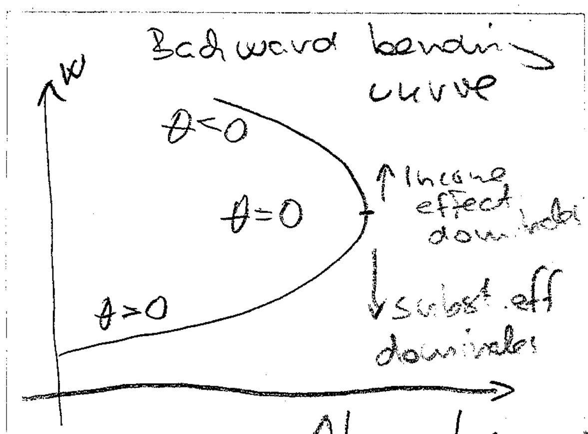

leisure inferior good

trabant

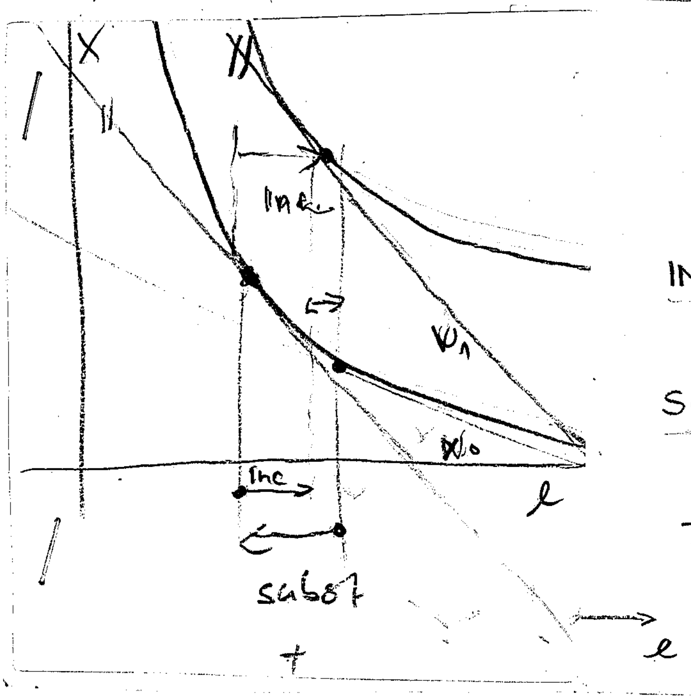
$$\left.\frac{\partial L}{\partial X_0}\right|_w > 0$$

• IMPACT OF WAGE (w is price of leisure)




$$\theta = \frac{\%\Delta L}{\%\Delta w} = \frac{\frac{\Delta L}{L}}{\frac{\Delta w}{w}}$$ $L_s$ labor supply elasticity




INCOME EFFECT $+ \frac{\partial L}{\partial I}$ $- \frac{\partial l}{\partial I}$

SUBSTITUTION EF: $+(L)\frac{dL}{dw}$

TOTAL EFFECT $\left.\frac{dL}{dw}\right|_{X_0} \gtrless 0$ subst. e. domin / income effect d