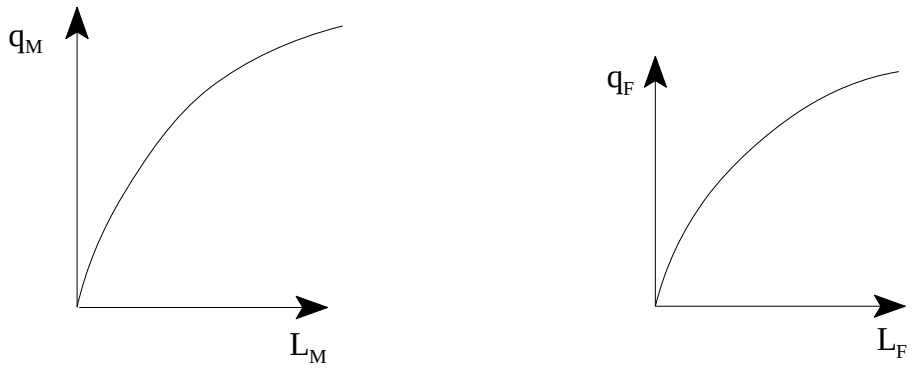
TWO SECTOR ECONOMY: PRODUCTION SIDE

(1) Case of one input: L (Labor)
- Assume 2 produced goods: M & F
- Fixed amount of labor: L (Needs to be allocated to the 2 sectors)
- Firms maximize profits taking prices (P_M & P_F) and wages (w) as given.
(i.e. we have perfect competition in output and input markets)

Assume that the production functions have decreasing Marginal Product of Labor (MPL)

Example:



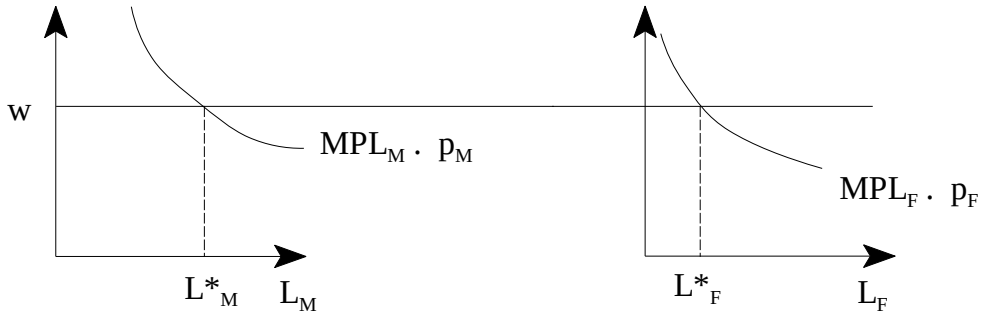
If both sectors produce positive amounts of output, profit maximization will require:

(+) $MPL_F \cdot p_F = w$

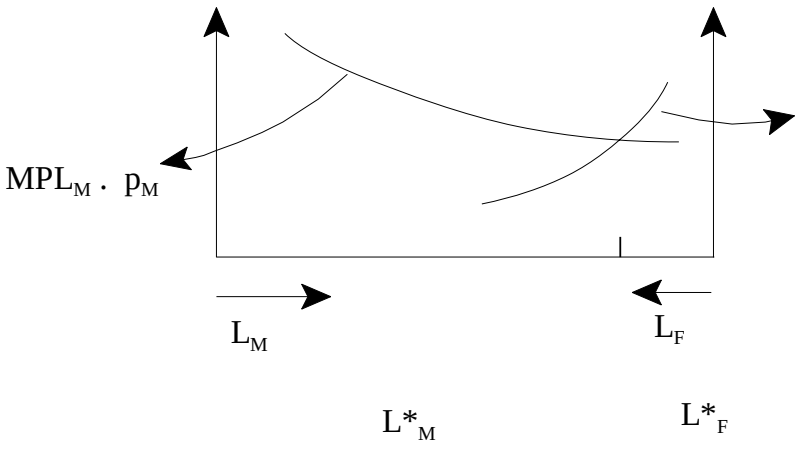
(++) $MPL_M \cdot p_M = w$

$\Big\} \Rightarrow MPL_F \cdot p_F = MPL_M \cdot p_M$ (*)

We can see now how labor is allocated. We get the MPL curves from the production functions and then use the profit maximizing conditions (+) & (++).



<u>OR</u>



(Not in Scale)

Things to do:

- What happens if $P_F \uparrow$?
- What happens if $P_M \uparrow$?
- What happens if $MPL_F \downarrow$?