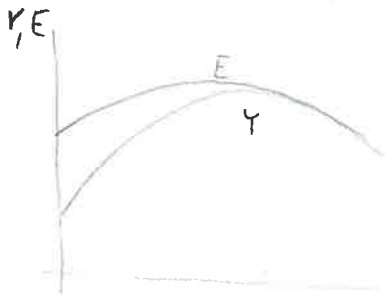
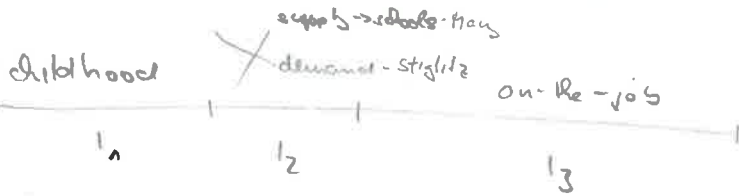


ON THE JOB TRAINING



$Y \& E$ would not raise if $C_E = 0 \rightarrow$ HC increases



- ON THE J.T is important OJT - formal, expensive, $RTS > 1$
 \rightarrow large employers
- learning by doing -
 older workers spend some
 time training going T&T
 smaller firms
- COSTS OF OJT Training
 - difficult to measure (lost time of both in production)

DECISION ABOUT THE COSTS OJT

- employer expects rate of return
- employee unwilling to pay in form of lower pay if increase of γ does not follow.

X

GENERAL & SPECIFIC HC

- G - skills of equal value in many firms (jobs)
- S - - - demanded by monopsonist or special methods (local firm producing shoes in the Oed sep)

$$VMP = MP * P = \frac{\partial Q}{\partial L} P$$

if competition -

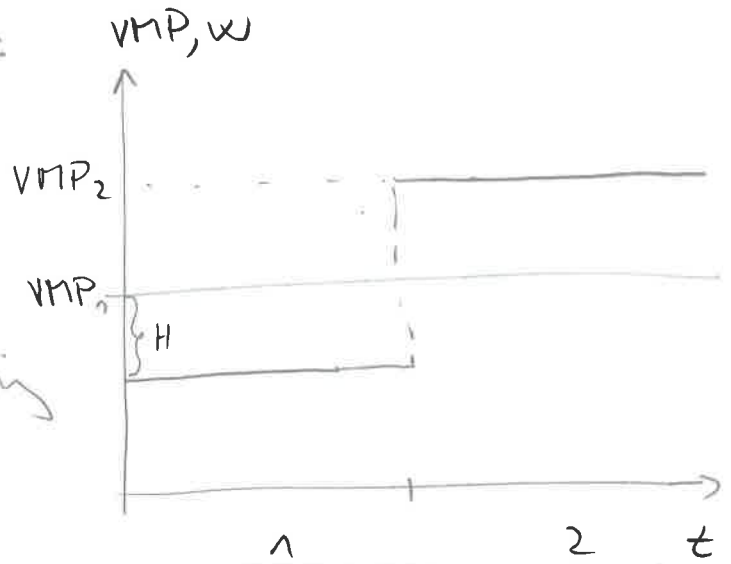
$$VMP = W$$

Whoever bears the cost rationally expects returns!

2 period model of OJT

If perfect competition

$$TC_1 + \frac{TC_2}{1+r} \leq VMP_1 + \frac{VMP_2}{1+r}$$



OJT in $t=1$: H costs of training

$$w_1 + H + \frac{w_2}{1+r} \leq VMP_1 + \frac{VMP_2^*}{1+r}$$

$$w_1 + H \leq VMP_1 + \underbrace{\frac{VMP_2^* - w_2^*}{1+r}}_G$$

NOTE:

$$VMP = MP \cdot P = \frac{\partial Q}{\partial L} P$$

If competition

$$VMP = w$$

WHO PAYS FOR H?

General HC: $G \stackrel{!}{=} 0$ ← forced by mkt to prevent losses
 $\hookrightarrow w_1 + H \leq VMP_1$

- medical interns
- out of firm courses IT, by
- monopsonies

$$w_1 \leq VMP_1 - H$$

worker sets

$$[VMP_1 - H] + \frac{VMP_2^*}{1+r}$$

Specific HC: consider $G = 0$ {costs covered by (w)}

alternative w not affected by H

$$\hookrightarrow w_1 = VMP_1 - H \rightarrow \text{sure costs}$$

$$w_2 = VMP_2^* \rightarrow \text{uncertain gains for } (w)$$

Prob lagoff

consider $w_1 = VMP_1$ {costs covered by F}

$$H \leq \frac{VMP_2^* - w_2}{1+r} > 0$$

↳ sure costs H

↳ uncertain gains for (F)

Alternative w not affected by H

RIOD MODEL OF OJT

$$IC_1 + \frac{IC_2}{1+r} \leq VMP_1 + \frac{VMP_2}{1+r}$$

on competition what

OJT in $t=1$: H costs of training

$$w_1 + H + \frac{w_2}{1+r} \leq VMP_1 + \frac{VMP_2^*}{1+r}$$

Define $G = \frac{VMP_2^* - w_2}{1+r}$ f. page \rightarrow gain for firm

$$w_1 + H \leq VMP_1 + G$$

~~Firm's point of view~~

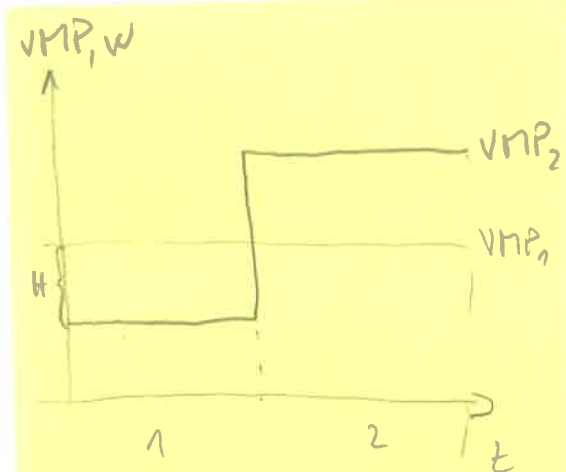
WHO PAYS?

GENERAL HC

- VMP_2 in all firms
- if $w_2 < VMP_2$ $\left\{ \begin{array}{l} \rightarrow \text{suit} \\ \rightarrow \text{quit} \end{array} \right\}$ losing workers
- $\Rightarrow G = 0 \Rightarrow w_1 = VMP_1 - H$
- Firms do not provide G. HC unless it is costly \rightarrow worker pays.

~~SPECIFIC HC~~

- medical interns
- gen. skill courses out-of-firm
Language-PC



$$\pi_1 = VMP_1 - w_1 - H$$

$$\pi_2 = VMP_2 - w_2$$

$$\pi_1 + \frac{\pi_2}{1+r} = 0 \text{ competitive}$$

Generally:

$$PV(MC) = PV(MR)$$

~~alternative~~ • alternative wage not affected by training

WHO PAYS & WHO GETS RETURN?

① Firm PAYS : $H_E > 0, G > 0$

but if worker quit \rightarrow loss

② Worker PAYS : $H_w > 0$, danger of laid-off \rightarrow loss.

So. Becker : $\bar{w} < w_2 < VMP_2$ sharing returns

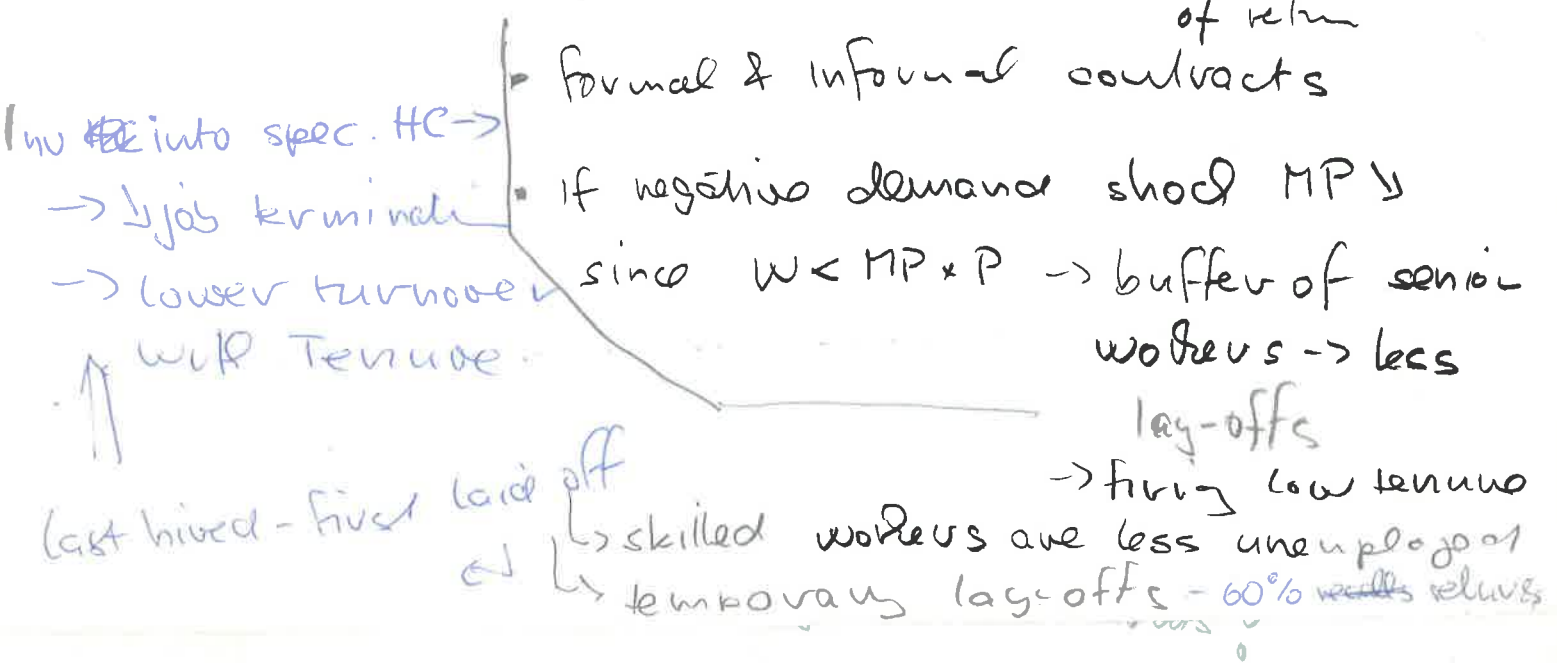
\hookrightarrow sharing cost H

IMPLICATIONS

IF SP. TRAINING • at T_1 ... worker's set $w_1 < VMP_1$
 \hookrightarrow slave on H

• at T_2 ... worker's set $w_2 < VMP_2^*$
 \hookrightarrow firm gets part of return

$w < MP * P$!!!



COST SHARING EVEN IN THE S CASE

1) Uncertainty about future - risk that employee will leave even with specific HC if he is not paying for it $\rightarrow w < w_n$
A form of a "bond" - rewards only if he stays

2) Cost sharing as incentive to learn \rightarrow returns also to worker

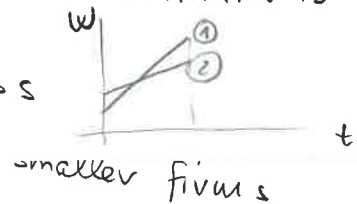
\Rightarrow DIVISION OF COSTS DEPENDS ON:

- Prob of job change
- Constraints of investment in training of workers

but workers at least partly pay the costs \rightarrow

UPWARD SLOPING AGE-EARNING PROFILE IF TRAINING IS TAKING PLACE

\rightarrow if identical workers in different jobs
PV should be equal
w training



- difficult to measure (lost time of both in production)

• DECISION ABOUT THE COSTS OUT

- employer expects rate of return

- employee unwilling to pay in form of lower pay if increase of γ does not follow

$\left. \begin{array}{l} \text{ } \\ \text{ } \end{array} \right\} X$

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