

Efficiency wages theory

Main feature in efficiency wages:

firms unilaterally set wages higher than the market wages, and choose not to cut wages down to the market-clearing level, because of the detrimental effect that this would have on:

- worker effort
- motivation

=> firm profits

The higher wage → “efficiency wage”

Efficiency wages mechanisms in the literature:

- Higher wages improve worker morale and effort; “gift exchange” (Akerlof, G.A. "Labor contracts as partial gift exchange." *The Quarterly Journal of Economics* (1982): 543-569)
- Higher wages help reduce shirking when effort is not perfectly observed (Shapiro, C., & Stiglitz, J. E. (1984), Equilibrium Unemployment as a Worker Discipline Device, *American Economic Review*, 74)

I. "Labor contracts as partial gift exchange."

Akerlof, G.A. (1982)

A small group of young women (10) employed exceeded the minimum work standards of the firm by a significant margin (on average by 15%).

Most of these women neither desired nor expected promotion in the firm in return of their extra-effort.

- The 10 young women worked as “cash posters” for a utility company in New England.
(To record customers’ payments on ledger cards at the time of receipt).
- The company’s standard for such cash posting was 300 per hour
- The average number of cash postings per hour was 353

3 aspects:

- Why the faster persons did not reduce their speed to the standard.
- Why the firm did not increase the standard.
- The output is easily observable.

Possible explanation:

- The maximization of something other than profits by the firm

Or

- The interaction of the workers with each other and with the firm that alters their utility functions.

Workers

Workers tend to develop sentiment for their co-workers and for the institution:

➡ Workers have utility for making gifts to institutions for which they have sentiment

➡ They gain utility if the firm relaxes pressure on the workers who are hard pressed

Gifts → reciprocity → fair wage

Firm

1. Work standards

An increase in minimum standards that would put pressure on the less productive workers might easily be considered by the group as a whole as failure by the firm to reciprocate the group's collective donation of average productivity in excess of the minimum requirements



the firm does not raise the minimum standards

2. Wage

“Fairness” of the wages the firm offers its workers



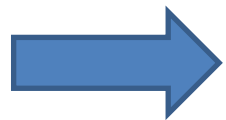
The remuneration must be greater than the wage received by other similar workers in similar positions

The firm cannot deal with each worker individually. It must treat the group of workers with the same norms (and wages)

II. Higher wages to reduce shirking

Shapiro, C., & Stiglitz, J. E. (1984)

“Threat” of firing workers as incentive device



Imperfect monitoring necessitates unemployment in equilibrium

To induce its workers not to shirk, the firm attempts to pay more than the "going (market) wage"



if a worker is caught shirking and is fired, he will pay a penalty

Higher wages are compensated through savings on monitoring costs (or, at the same level of monitoring, on increased output due to increased effort)

Worker's net utility function:

$$U(w,e) = w - C(e)$$

w = equilibrium market wage

e = effort

$C(e)$ = cost of effort

\hat{w} = the wage offered by the firm

$$\hat{w} > w$$

p = probability of being detected shirking

e^* = required effort

$$e < e^* \rightarrow C(e) < C(e^*)$$

The worker will never supply e s.t. $0 < e < e^*$, but just:

$$e = 0 \rightarrow C(e=0) = 0$$

Worker's expected net utility if he decides to shirk:

$$\begin{aligned} E(U(e = 0)) &= pw + (1 - p)\hat{w} - 0 \\ &= pw + (1 - p)\hat{w} \end{aligned}$$

Worker's expected net utility if he decides not to shirk:

$$E(U(e = e^*)) = \hat{w} - C(e^*)$$

The worker will be incentivized to supply the required effort if:

$$E(U(e = e^*)) \geq E(U(e = 0))$$

That is if:

$$\hat{w} \geq w + \frac{C(e^*)}{p}$$

\hat{w} must be higher:

- The higher the required effort (e^*)
- The lower the probability of being detected shirking (p)

- To induce its workers not to shirk, the firm attempts to pay more than the "going wage"
- This is true for all firms
- When they all raise their wages, the incentive not to shirk disappears

BUT:

As all firms raise their wages, the total demand for labor decreases

 unemployment results

With unemployment, even if all firms pay the same wages, a worker has an incentive not to shirk

The equilibrium entails quantity constraints

 **job rationing**