

Fixing a Mistake in: 8 Further Topics in Moral Hazard

These can be solved to yield $m_1 = 2e_1^*$ and $m_2 = 2e_2^*$. We still need to determine the base wage, \bar{m} . Substituting into the participation constraint, which will be binding, and recalling that we defined the agent's reservation expected wage as $w^* = e_1^2 + e_2^2$,

$$\begin{aligned}\pi_{agent} &= \bar{m} + e_1 m_1 + e_2 m_2 - e_1^2 - e_2^2 = 0 \\ &= \bar{m} + e_1^* (2e_1^*) + e_2^* (2e_2^*) - w^* = 0 \\ &= \bar{m} + 2w^* - w^* = 0\end{aligned}\tag{8.33}$$

so $\bar{m} = -w^*$.

The base wage is thus negative; if the principal finds the agent shirking when he monitors, he will pay him less than zero. That is surprising when $e_1^* + e_2^* < 1$, because then the principal wants the agent to take some leisure in equilibrium, rather than have to pay him more for a leisureless job. It is less surprising that the base wage is positive when $e_1^* + e_2^* = 1$; that is, when efficiency requires zero leisure. Why pay the agent anything at all for inefficient behavior?

The key is that the base wage is important only for inducing the agent to take the job and has no influence whatsoever on the agent's choice of effort. Increasing the base wage does not make the agent more likely to take leisure, because he gets the base wage regardless of how much time he spends on each activity. If $e_1^* + e_2^* = 1$, then the agent chooses zero leisure, knowing that he would still receive his base pay for doing nothing, because