

Unemployment Insurance Fraud and Optimal Monitoring

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June 13, 2012

Abstract

In this paper, we study the optimal monitoring of fraudulent behavior in a model of unemployment insurance. An unemployed agent who finds a job can hide his true employment status and continue claiming unemployment benefits. While most of the existing literature focuses on hidden search effort, the evidence suggests that the benefits overpaid because of fraud are more than ten times the overpayments due to insufficient search. We use a model with constant absolute risk aversion preferences, where employment status is private information. The agent transits to employment according to a Poisson process and employment is an absorbing state. The unemployment insurance agency has a costly verification technology to detect the agent's true employment status. We consider pre-commitment mechanisms, formulate the problem as one of optimal control and apply the Pontryagin minimum principle. Our optimal mechanism uses two instruments: insurance and monitoring. We show that the optimal monitoring mechanism consists of cycles: the interval between two consecutive monitoring periods is a constant, independent of history. For the unemployed agent to report the transition to employment truthfully and without delay, it must be the case that delaying the report yields a lower payoff. Thus, late reporters face a higher wage tax relative to early reporters within each monitoring cycle. However, the wage tax decreases immediately after verification: the wage tax is non-monotonic. The consumption of the unemployed decreases with the duration of unemployment. It starts below the consumption of the employed at the beginning of each monitoring cycle, but eventually exceeds the consumption of the employed before the end of each cycle. Our mechanism also prevents quitting and rejection of employment opportunities.

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