On Optimal unemployment insurance

Shavell and Weiss: The optimal payment of unemployment insurance benefits over time, Journal of Political Economy 1979

Starting point:

- Unemployment insurance's main purpose is clearly to insure workers against wage loss during unemployment
- But, U.I. also lengthen the unemployment insurance:
    - Lower search effort
    - Higher reservation wage

Problem

- They ask, how should benefits be paid over time?
    - Aim: maximize the utility of the unemployed
    - Constraint 1: the unemployed act in a self-interested way
    - Constraint 2: the total size of the U.I. budget is given
- They do not take into account:
    - How individuals become unemployed (quits, layoffs, separation)

Focus only on the case where unemployed have no wealth and cannot borrow[1]

- If effort plays no role (unemployed cannot affect the probability of finding a job, now there is no moral hazard problem)
    - Benefits should be constant over time
        - Why: marginal utilities from period to period should be equal
            - Standard insurance argument
        - How high: as high as the budget allows for. They consider at situation where the unemployment benefit is well below wages (because if not, the assumption of exogenous separation rate becomes unrealistic)
- If effort plays a role and it cannot be monitored (hence, we then get moral hazard problems)
    - Benefits should be decreasing over time, is always positive but approaches zero
        - Why:
            - Note first that now, everything that increases the utility of being unemployed next period will make this event more probable
                - Through search effort and reservation wage
            - Hence, if we reduce the benefit tomorrow and increases it today we get the following effects:

[1] In the paper they also study a case where unemployed workers have wealth. They show that in this case, unemployment benefits should be zero until the marginal utility of wealth is sufficiently high. From then on benefits should be constant in the case with no moral hazard and falling in the case with moral hazard. In the latter case benefits will thus be hump-shaped.

    - The probability of being unemployed falls – hence the expected insurance payments fall and we can increase benefits today even more
    - We get less good insurance since the marginal utilities no longer are equal
- But, as you see, in the former case it was only an insurance problem, now there is a trade-off between insurance and providing incentives – which will alter the optimal payment scheme
    - It is the knowledge of that benefits will be lower in the future that provide incentives – and not lower benefits now (now you are unemployed anyhow)
- The flip-side of the coin is clearly that workers that remain unemployed for a long time is poorly insured)
- How much/fast benefits should decrease will depend on i.e. risk aversion

Hopenyan and Nicolini: Optimal unemployment insurance, The Journal of Political economi, 1997

- These guys use new mathematical methods to first redo the results of Shavell and Weiss (1979) and then introduce another policy instrument – taxes conditional on how long time workers used to find a new job
    - Allows for much smoother consumptions paths since the earnings consequences of not finding a job are lasting much longer (infinite)
    - See Table 3.3. Page 144