

Job Search Models and Code

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1 The Basic Job Search Question

Consider a worker who lives infinitely and lives their life in discrete time periods $t = 0, 1, \dots$. They possess some temporal discount factor $0 < \beta < 1$ and also have an increasing concave utility function $u(\cdot)$. At each time period t , this worker can either be employed or unemployed. If they are employed then they will have been given some job offer in the past they have accepted which pays them a wage w . If they are unemployed, in the beginning of the time period they draw an employment offer w from some distribution $F(\cdot)$ and then have the choice to accept the job for life such that they earn that wage w for the rest of their lives or receive a unemployment benefit b in that period to remain unemployed in the beginning of the next period.