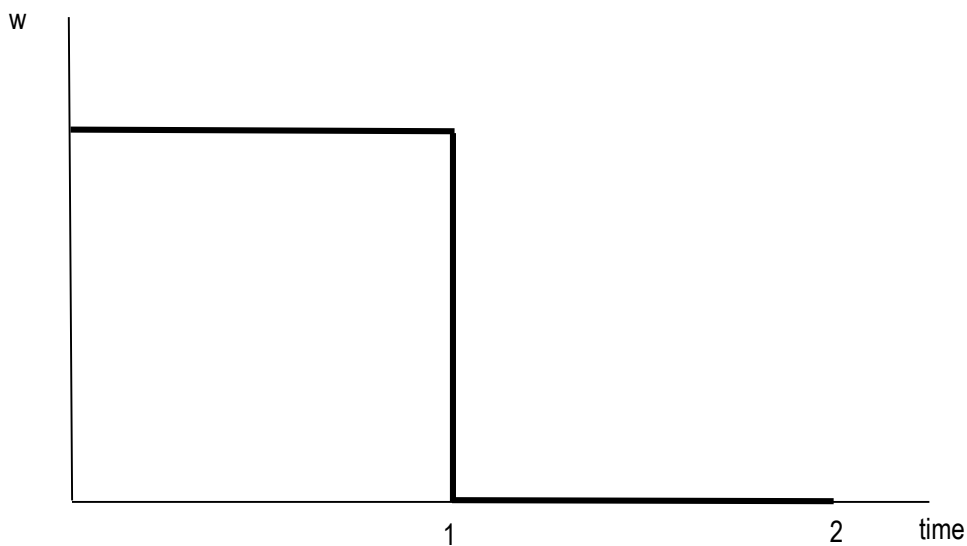


In the Diamond overlapping-generations model, individuals live for two periods (with no connection to older or younger generations). They work and earn wages in the first period and have no external retirement income in the second. Thus, their pattern of labor income looks like the bold line in the figure below.



1. If the individual maximizes utility by smoothing consumption (ignoring, for simplicity, time preference and interest rates), what will the optimal consumption path look like?
2. The individual starts with no assets and leaves no bequest. Given her income and consumption paths, what will the path of her accumulated assets look like over her lifetime?
3. If the only asset in the model is real capital, what kinds of transactions does she undertake in the “capital market” in the first period of her life? In the second period?