Dynamic Assignment of durable objects

Abstract: We analyze the assignment of durable objects (positions, offices, dorm rooms) to successive generations of agents. Because agents have temporary property rights over the objects, the assignment mechanism must satisfy an individual rationality constraint, and the assignment process is dynamic. We first characterize fair assignment rules in a model with homogeneous agents, and show that the seniority and rank rules are the only fair rules which satisfy a condition of independence. When agents are heterogeneous, we exhibit a conflict between efficiency and fairness, but show that the existence of fair and efficient rules in dichotomic societies. We also analyze the dynamically efficient assignments in a model with a continuum of types, and show that the planner always prefers to assign the object to older agents. The dynamically efficient assignment is characterized by a stationary selectivity rule, which measures the gap between the types of young and old agents for which goods are assigned to young agents.