Abstract

Several matching markets are observed to be complex because they have their own specific nature or must respect ethical or social concerns. An important feature that is not well analyzed in the literature is the incorporation of "balancedness" in matching. For example, a nursery school both hires teachers and enrolls children, and these two processes are usually conducted independently of one another. However, the school needs to balance the number of teachers with the number of children; otherwise, it cannot operate due to budget constraints or legal issues. Therefore, each matching market has its own "allocation space," which we define as a subset of all matchings. For such an environment, we propose a new solution concept called fairness-oriented stability. We show that it exists if and only if the allocation space includes the empty-matching. We then examine welfare analyses and comparative statics of the solution. Another solution concept called efficiency-oriented stability is also proposed; unfortunately, it merely exists.