Explanatory significance of equilibrium depends on the underlying dynamics. A number of questions of stability and robustness are relevant. Here I investigate these questions with respect to some simple evolutionary models from my book, Evolution of the Social Contract. These models use the replicator dynamics. In each of these models, I identify the equilibria and characterize their local stability properties. Then I show that the foregoing results are robust over a large class of adaptive dynamics that might be considered as alternatives to the replicator dynamics. I investigate the structural stability properties of the three models. The question of the structural stability of a model of bargaining with correlated encounters raised by D'Arms, Batterman, and Gorny (1998) is answered in the affirmative. The other two models are not structurally stable. Modification of a structurally unstable signaling system model to allow for correlated encounters results in a structurally stable model.