Path-Dependent Policy Dynamics in Stochastic Environments

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Abstract

Motivated by recent empirical studies (e.g. Persson and Tabellini 2003) regarding how the patterns of fiscal policy differ in countries with various constitutional arrangements, this paper presents a dynamic bargaining model to address the following two questions: First, how do government policies respond to the changing economic environment? Second, how does the allocation of proposal power affect the responsiveness of government policies to preference shocks?

We present an infinite-horizon model in which every period two parties bargain over a one-dimensional policy. The policy, once enacted, is in effect until it is replaced by a new policy. Preferences of the parties depend on the state of the economy, which fluctuates stochastically following a stationary Markov process. We characterize and compare the patterns of policy dynamics resulting from two institutions that differ in the allocation of proposal power: (A) a proposal protocol with fully concentrated power where in every period one party is randomly selected to make a take-or-leave offer, and (B) a proposal protocol with fully dispersed power where in every period the parties make offers in turn until some proposal is unanimously approved.

We show that the institution with dispersed power displays a version of gradualism: the policy, if originally outside the Pareto set, always moves to the boundary of the Pareto set that is closest to its status quo position. This results as the party favored by the status quo, say party A, effectively holds stronger proposal power as remaining the status quo harms the other party more than it harms A.

Regardless of the proposal protocols, the policy is inertial in the long run if the magnitude of shocks is sufficiently small, the players are sufficiently patient, or the degree of preference heterogeneity is sufficiently large. Moreover, the policy choice in every period depends not only on the state of the economy in that period, but also on the states in the past. Such a path-dependent property accounts for a rich set of

policy dynamics. For example, a policy that is made in response to a (temporary) crisis may be irreversible after the crisis goes away. Therefore, two countries that are otherwise identical may implement different policies only because they went through different historical events.

Our comparative results indicate that the policy on average responds to shocks more frequently and to a larger extent if it is made through the institution with concentrated proposal power than the one with dispersed proposal power. The welfare implications, however, are ambiguous.

Keywords: Bargaining, proposal power, endogenous status quo, gradualism, pathdependence, policy inertia, ratchet effect, policy dynamics, preference shocks.