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On the efficiency-effects of private (dis-)trust in the government

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Abstract

We consider a version of the seminal Kydland–Prescott model where, in each period, some private agents believe the policy announcements made by the government. The other agents follow a standard optimizing strategy. The fraction of agents who believe the government changes over time according to a word-of-mouth learning process. We show that the initial number of believers and the speed of learning can have drastic consequences for the policy followed and the losses experienced by the different agents. In particular, the utility of the private sector may jump upwards if the initial number of believers exceeds a given threshold.

JEL classification: C69; C79; E5

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1. Introduction

One of the most ubiquitous and stable characteristics of real-life policy-making appears to be that decision-makers repeatedly make announcements and promises that later they do not respect. An important strand of economic literature argues that this type of behavior leads

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to decision-makers losing reputation and public confidence, something which is assumed detrimental to all economic agents. Thus, it may be indispensable to impose strict rules to insure that announcements are respected.

One may wonder why announcements are made and why they influence individual behaviors if trusting them is detrimental. In this paper, we show that unkept promises can reduce the losses not only of the government but also of all private agents if the private sector includes any number of naive *Believers* who take the announcements at face value. Moreover, if agents tend to adopt the behavior of other, more successful ones, a stable equilibrium may exist where a positive fraction of the population consists of Believers. This equilibrium Pareto-dominates the one where all agents act rationally, that is, optimize their objective function under perfect information. To attain this superior equilibrium, the government builds reputation and leadership by insuring good results for the Believers, rather than by pre-committing to its announcements.

This Pareto-superior equilibrium is not the only possible one. Depending upon the model parameters (most crucially upon the initial fraction of Believers and upon the intensity of information transmission among private agents, that is, upon the *flexibility* of the private sector), it may be rational for the government to steer the Pareto-inferior rational equilibrium. This paper, thus, stresses the importance of the initial confidence level in the population and of private flexibility in explaining the policies followed by a government, the welfare level realized, and the persistence or decay of private confidence in the governmental announcements.

There are two main prerequisites for the existence of a Pareto-superior equilibrium where part of the population believes the governmental announcements. The first one is the absence of major conflict of interest among private agents and between the private agents and the government. The second one is a poor, inefficient outcome for all agents and for the government under the standard rationality hypothesis. In the model, this poor outcome is due in particular to the atomistic nature of the private sector and to the game-theoretic character of the equilibrium. These properties are shared by numerous models in economics, suggesting that the approach delineated here can readily be applied to other contexts.

The potential usefulness of deliberately employing misleading announcements to Pareto-improve upon standard game-theoretic equilibrium solutions was suggested in Vallée et al. (1999) and in subsequent papers by the same authors for the case of general linear-quadratic dynamic games. An application to the credibility problem in monetary economics was developed in Deissenberg and Alvarez Gonzalez (2002), who use a model similar to the one presented here but with different learning processes and dynamics. Among other papers of related interest, Cho and Matsui (1995) and Ireland (2000) develop models of monetary policy making with boundedly rational agents where the government can build credibility by adopting a policy unilaterally.

The paper is organized as follows. In Section 2, we first present the static economic model underlying this paper and its main properties. We then introduce the word-of-mouth learning process that generates a constant flow of private agents who adopt the strategy (to believe or not to believe) that performed best in the near past. This allows us to define the intertemporal optimization problem of the government. In Section 3, we present the main insights obtained from the model. Section 4 summarizes the mechanisms at work in the model and the main results, and hints at possible further applications or extensions.