Accepted Manuscript

Dynamic agency with persistent observable shocks

Rui Li

PII: S0304-4068(17)30068-X
DOI: http://dx.doi.org/10.1016/j.jmateco.2017.04.003
Reference: MATECO 2153

To appear in: *Journal of Mathematical Economics*

Received date: 8 December 2014
Revised date: 22 April 2017
Accepted date: 23 April 2017

Please cite this article as: Li, R., Dynamic agency with persistent observable shocks. *Journal of Mathematical Economics* (2017), http://dx.doi.org/10.1016/j.jmateco.2017.04.003

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Dynamic Agency with Persistent Observable Shocks

Rui Li*
College of Management
University of Massachusetts Boston

Abstract

This paper studies a continuous-time hidden-action model with persistent observable shocks. In this model, I develop a method to characterize the optimal contract with history-dependent effort exertion and shirking decisions. Temporal shirking is always optimal after some histories as long as a positive persistent shock is expected. As a result, my model gives rise to a mechanism through which the moral hazard problem amplifies macroeconomic fluctuations. I also show the pattern of the agent's utility adjustments with respect to persistent shocks and its implications for compensation design.

Keywords: Dynamic contract, persistent shock, business cycle.

1 Introduction

Firms are subject to large, unpredictable shocks that are beyond their control, are publicly observable, and have persistent impacts on their profitability. For example, a natural disaster can destroy a firm's production facilities, requiring time-consuming rebuilding, or a technology innovation can permanently improve a firm's productivity. In particular, most macroeconomic shocks are observable or can be inferred from publicly available aggregate economic indexes, and they are persistent, as shown by the real business cycle literature. Therefore, if information frictions exist, understanding incentive provisions with persistent observable shocks can have profound implications for many important economic issues, especially in macroeconomics. According to the models of Holmström [1979, 1982], these shocks should be irrelevant to contract design

*100 Morrissey Boulevard, Boston, MA 02125. Email: abclirui@gmail.com. TEL: 1-617-287-3182.

Download English Version:

https://daneshyari.com/en/article/5101410

Download Persian Version:

https://daneshyari.com/article/5101410

Daneshyari.com