Stabilizing expectations at the zero lower bound: Experimental evidence

Jasmina Arifovic, Luba Petersen

Department of Economics, Simon Fraser University, Canada

A R T I C L E   I N F O

Article history:
Received 29 October 2015
Revised 15 April 2017
Accepted 18 April 2017
Available online 11 May 2017

JEL Classification:
C92
E2
E52
D50
D91

Keywords:
Monetary policy
Expectations
Zero lower bound
Learning to forecast
Communication
Laboratory experiment

A B S T R A C T

Our study demonstrates how agents’ expectations can interact dynamically with monetary and fiscal policy at the zero lower bound. We study expectation formation near the zero lower bound using a learning-to-forecast laboratory experiment under alternative policy regimes. In our experimental economy, monetary policy targets inflation around a constant or state-dependent target. We find that subjects’ expectations significantly over-react to stochastic aggregate demand shocks and historical information, leading many economies to experience severe deflationary traps. Neither quantitatively nor qualitatively communicating the state-dependent inflation targets reduce the duration or severity of economic crises. Introducing anticipated and persistent fiscal stimulus at the zero lower bound reduces the severity of the recessions. When the recovery of fundamentals is sufficiently slow, participants’ expectations become highly pessimistic and neither monetary nor fiscal policy are effective at stabilizing the economy.

© 2017 Elsevier B.V. All rights reserved.

1. Introduction

How should monetary and fiscal policy be conducted when nominal interest rates are close to zero? This question is important because once interest rates reach zero and cannot be reduced further — the zero lower bound (ZLB) — central banks lose an important tool for stimulating the economy. In an economy already in recession and close to the ZLB, a further negative demand shock could make for a dire situation, in which case a central bank may not be able to lower interest rates sufficiently to stimulate the economy. If the recession is persistent and severe, households and firms are likely to be pessimistic about the ability of the central bank to provide the stimulus needed to turn the situation around. The appearance of the ZLB has the potential to generate a prolonged self-fulfilling macroeconomic crisis, often referred to as a liquidity trap.

Macroeconomists and policy makers generally agree that policies which create an expectation of inflation would alleviate the severity and duration of liquidity traps. For example, Eggertsson and Woodford (2003, 2004) show that creating expectations for inflation by promising to keep nominal interest rates low by way of increased inflation targets, even after the
The other policy option is quantitative easing. Note that the effect of quantitative easing could, in part, go through expectations as well. 

2 See Walsh (2009) for a detailed discussion on the ability of inflation promises to stabilize expectations.

3 These state-dependent rules are also consistent with the policy advice given (though not taken) to Japan when it faced the ZLB — e.g., Krugman (1998), McCallum (2000) and Auerbach and Obstfeld (2005). Price-level targeting policies achieve relatively greater economic stability than inflation targeting policies in environments where central banks mistakenly see the expectations of private agents as rational (e.g., Preston, 2008).
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات