Supply side hysteresis: the case of the Canadian unemployment insurance system

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Abstract

This paper presents results from a 1971 natural experiment carried out by the Canadian government on the unemployment insurance system. At that time, the generosity of the UI system was increased dramatically. We find some evidence that the propensity to collect UI increases with a first-time exposure to the new UI system. Hence, as more individuals experience unemployment, their lifetime use of the system increases. This supply side hysteresis effect may explain why unemployment has steadily increased over the 1972–1992 period, even though the generosity of unemployment insurance did not. © 2000 Elsevier Science S.A. All rights reserved.

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1. Introduction

A recurrent theme in policy debates regarding social welfare programs is the relationship between benefits and the disincentives to work (Moffitt, 1982). In the case of unemployment insurance, there is a great deal of evidence suggesting that it tends to increase both the duration of unemployment and the probability of

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becoming unemployed.[1] Moreover, work by Katz and Meyer (1990), Corak (1993) and Meyer and Rosenbaum (1996) find evidence that workers adjust their labor supply so that unemployment insurance may subsidize part-year work. Despite this micro-econometric evidence, there does not seem to be a direct relationship between unemployment insurance benefits and the recent secular rise in unemployment in the OECD[2]. Lindbeck (1995) has pointed to social norms and the sluggish response of individual labor supply to changes in incentives as a potential source of 'supply side hysteresis' that may help explain this secular trend.

The goal of this paper is to build upon this idea, and see whether recent trends in the use of UI in Canada can be explained using a simple adaptive learning model. In a standard labor supply framework one supposes that changes in worker alternatives result in an immediate behavioral response. Moreover, whether or not the individual has had experience with the alternatives is irrelevant to his or her choice. However, there is a large body of evidence demonstrating that experience does matter for human decision making (e.g. Wickens, 1992).

It is well recognized in the economics literature that it takes time for individuals to find an optimal response, and hence short-run supply elasticities are likely to be smaller than long-run elasticities.[3] The issue that we wish to address in the study is the importance of this lagged adjustment in the case of labor supply responses to changes in the unemployment insurance (UI) parameters. A number of studies have shown that individuals adjust their labor supply as a function of the parameters of the system in the predicted direction. However, in the case of the Canadian UI system, UI use and unemployment increased steadily from 1971 until the 1990s, though during this period benefit level were constant or falling (see Figs. 1 and 2).

The hypothesis we wish to explore is that workers did not immediately respond to the large increase in benefits that occurred in 1971. Rather, when workers experienced unemployment for the first time, due to natural turnover or a recession, this exposed them to UI and caused them to begin exploring ways to use the UI system as a subsidy to part-year work. This was possible due to a number of rule changes that occurred in 1971. First, coverage of the UI system was expanded from 68 to 96% of the work force. The number of weeks of work needed to qualify for benefits was reduced from 30 weeks in a 2-year period to 8 weeks in a single year. The maximum number of weeks during which benefits could be received by a worker having worked the minimum number of weeks required to

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[1] See, for example, Topel (1983), Meyer (1990) for the United States, and Ham and Rea (1987) and Green and Riddell (1993) for Canada.

[2] See, for example, Layard et al. (1991).

[3] See Alchian (1950) for a nice discussion of adjustment to utility maximizing behavior. The fact that costly adjustment results in different long-run and short-run elasticities of response is an old idea that goes back to at least Marshall (1948).