Economic Modelling 27 (2010) 1199–1210

Contents lists available at ScienceDirect

Economic Modelling

journal homepage: www.elsevier.com/locate/ecmod

A political economy perspective on persistent inequality, inflation, and redistribution

Radhika Lahiri *, Shyama Ratnasiri

Queensland University of Technology and Shyama Ratnasiri, Queensland University of Technology, Australia

ARTICLE INFO

Article history:
Accepted 22 February 2010

Keywords:
Political economy
Inflation
Inequality
Redistribution
Voting

ABSTRACT

In this paper we examine the dynamics of the link between inequality and inflation from a political economy perspective. We consider a simple dynamic general equilibrium model in which agents vote over the desired inflation rate in each period, and inequality is persistent. Inflation in our model is a mechanism of redistribution, and we find that the link between inequality and inflation within any period or over time depends on institutional and preference related parameters. Furthermore, we find that differences in the initial distributions of wealth can yield a diverse set of patterns for the evolution of the inflation and inequality link. Relative to existing literature, our model leads to more precise predictions about the inflation–inequality correlation. To that end, results in the extant empirical literature on the inflation and inequality link need to be interpreted with caution.

1. Introduction

The empirical experience of some countries prior to gaining central bank independence exhibits a great deal of diversity in economic outcomes. A common feature of this diversity, however, is that there is significant fluctuation observed in inflation, inequality and other economic aggregates. Early political economy models captured the idea that these fluctuations in inflation were politically induced. A seminal paper addressing this issue is that of Huffman (1997). In a dynamic equilibrium model constructed to analyse the implications of different degrees of central bank independence, he shows that when agents are permitted to vote on the desired inflation rate and labour taxes to finance government spending, there is a great deal of fluctuation in inflation, output and investment. On the other hand, if the central bank is independent in the sense that agents are *not* allowed to vote on inflation and taxes, these fluctuations do not arise.

It is then of interest to explore *why* such fluctuations arise simply as a result of allowing political economy influences on the determination of central bank policies. That is, the behaviour of economic agents who cause these fluctuations must have an underlying economic rationale. Subsequent strands of literature have therefore focussed on *inequality* as the key mechanism behind these outcomes. The theoretical rationale provided in Dolmas et al. (2000), for example, is that inflation is a mechanism of redistribution, which implies that in the presence of inequality there is likely to be a greater degree of political pressure exerted on monetary authorities to use *inflation* as a re-distributive mechanism.

Similar in spirit to this paper is the extension considered in Bhattacharya et al. (2005), in which allowance is made for the fact that some agents in the economy can shield themselves from inflation by holding assets that are not subject to the inflation tax. They find that the relationship between inflation and inequality is non-monotonic, in contrast to the positive relationship suggested by Dolmas et al. (2000). Both these papers however, do not explore the dynamic implications of their models. In that sense, they do not directly address the inflation–inequality link as a source of the fluctuations that are seen in the data. Furthermore, while Huffman's (1997) model examines the dynamic patterns in inflation that are politically induced, these fluctuations are typically of a very stylized nature.

To that end, a combination of the different approaches described above is warranted. Ideally we would like a model to be dynamic as in Huffman's (1997) approach, while at the same time providing a scope to examine the inflation–inequality link considered in Bhattacharya et al. (2005). This paper therefore examines a model which is an extension of Bhattacharya et al. (2005). Specifically, we incorporate dynamics by allowing agents to leave bequests to the next generation. Furthermore, the alternative mechanism of redistribution considered in our model is that of progressive taxation. This is of particular importance given that Bhattacharya et al. (2005) consider the somewhat regressive alternative of lump-sum taxes, which is likely to produce a bias towards a positive inflation–inequality correlation.[1] (Albanesi, 2007). In other words, extant political economy models do not attempt to examine the inflation–inequality relationship in the presence of *alternative* means of redistribution. *A priori*, however, this is very important — inflation as a

* Corresponding author.
E-mail address: r.lahiri@qut.edu.au (R. Lahiri).

[1] The overall relationship between inflation and inequality in their model is non-monotonic. However, for a very large range of inequality levels (as measured by the Gini coefficients of resource endowments) the relationship is, in fact, positive.

0264-9993/$ – see front matter © 2010 Elsevier B.V. All rights reserved.
doi:10.1016/j.econmod.2010.02.011

mechanism of redistribution would be relatively unimportant if other mechanisms of redistribution were sufficient.

Secondly, empirical evidence of the experience of some Latin American and other developing economies shows periods of cycles in inequality and annual average rates of inflation, where inequality is measured using the Gini coefficients of income distributions. Such cycles were experienced during periods *before* the implementation of macroeconomic reforms in relation to promoting the independence of central banks. See for example, Bittencourt (2009), Acemoglu et al. (2003), and Cukierman et al. (1992, 2002). We also present some descriptive statistics on the inflation and inequality patterns of some Latin American countries in Fig. 1. In the case of Brazil, for example,

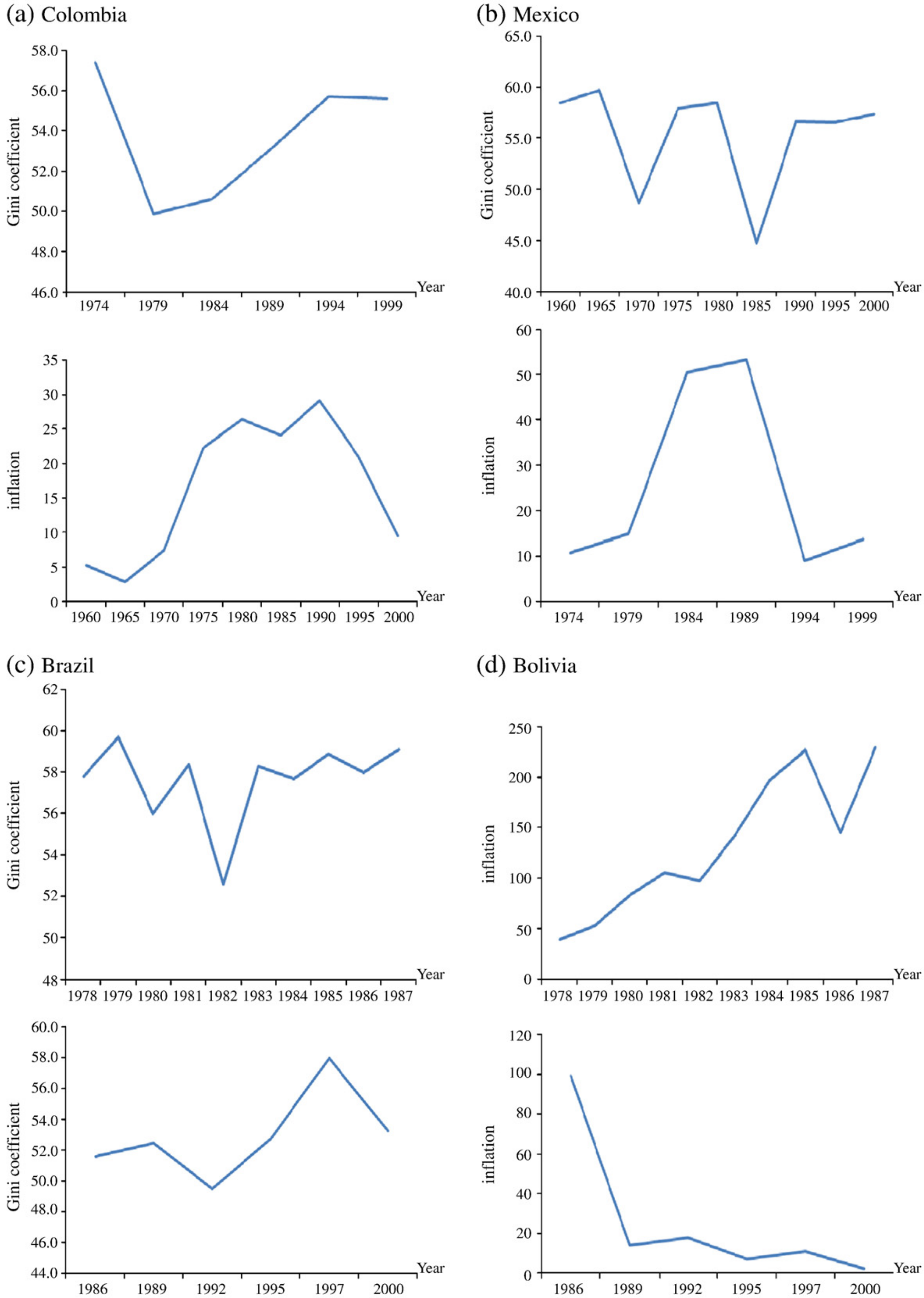

Fig. 1. Inflation and inequality in some Latin American countries.