On Monetary Policy, Unemployment, and Economic Growth

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Abstract

Recognizing the possible relation between investments, economic growth and unemployment, and how there is not an established impact of an unlikely productive project failure on the secondly mentioned variables, we address such relation and asses theoretically the effect of different instruments of monetary policy on the mentioned macroeconomic indicators. To do this we modify two models of economic growth by considering the role of entrepreneurs, risk takers, and a monetary authority which is the average agent of the economy that is assumed to be aware of how the inflation can damage equally the individuals' life style, independently of their particular levels of income, finding that the impact of the monetary instruments depends on the behavior of the population.

Keywords: Monetary Authority, Endogenous expansive policy, Inflation, Unemployment, Economic Growth.

JEL: E5, E2, O3, O4

1 Introduction

Why are the macroeconomic indicators important? Why are some goods more expensive in more developed regions? Why is there unemployment? Why is there poverty? Are the poor always unemployed? Are the unemployed always poor? Is unemployment always voluntary? Which is the relation between the aggregate investments and the unemployment in

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the short run? How could the inflation affect the life style of the individuals? Would the individuals with low incomes be affected equally by high inflation levels? After addressing these questions, we consider important the study of economic growth, and the emphasis on the understanding of the short run relations which involve variables like unemployment and inflation.

The relevance of economic growth, inflation, and unemployment on the life style of the individuals has motivated many authors who looked for establishing a commitment between these variables. Among the makers of theories which concern these indicators we find famous authors like J. M. Keynes (1883-1975), or A. W. Phillips (1914-1975).

More recently there were also important works which could be considered relevant in the understanding of the relation between the mentioned variables. Bernanke and Mihov (1998) developed a model-based methodology for measuring innovations in monetary policy and their macroeconomic effects, and proposed a new measure of the overall stance of policy. Boivin and Giannoni (2006) investigate the implications of changes in the structure of the U.S. economy for monetary policy, and find that responding more strongly to inflation expectations, monetary policy has stabilized the economy more effectively in the post 1980 period which seems to contradict the findings of Kuttner and Mosser (2002) about how monetary policy effects appear to be somewhat weaker than they were in past decades.

Unlike Chen (2007) who finds that empirical evidence suggests that monetary policy has larger effects on stock returns in bear markets, also showing how contractionary monetary policy leads to a higher probability of switching to the bear-market regime, in the present work, we look for pointing out under which conditions the policies of the monetary authority can be effective in increasing economic growth, and in reducing unemployment, which shall takes us to highlight the importance of entrepreneurs and risk takers in a decentralized economy. Furthermore, our findings can be considered as an accurate background for the positive relationship between bank credits and the firms productivity which is found by Villalpando B. (2015).[1]

The work is composed by three parts: The first part deals with the relationship between monetary policy and economic growth, and the second part addresses the relationship between monetary policy and unemployment. Both of these parts consider how inflation can arise as a consequence of the actions taken by the monetary authority. Finally the third part concludes.

[1] Barro and Sala-i-Martin (2004) find a positive correlation between the share of investments and economic growth.

2 Some general settings of the models

Although some general assumptions and explanations which are usually done in the development of mathematical models of economic growth may not be so necessary to be mentioned, and could be taken for granted, we shall repeat them in the following.

We assume that the economy is closed. We accept that all the final product firms produce under perfect competition, and that supply is always equal to demand. The relative prices of the final products are given by the composition of the total output. Moreover, it may result important to mention that the second part will be developed under the assumption of each unit of capital being equally productive independently of the moment of its investment.

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