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New Monetarist Phillips curve

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Abstract

This paper aims to analyse the cointegration and causality relationships between inflation, GDP and unemployment by using Markov Switching –VAR and Markov Switching Causality tests for the period from 1957(2) to 2014(3) in USA. This study complements previous empirical papers. But at the same time, it differs from the existing literature by using Markov Switching VAR and Markov Switching Causality method which determined there is long-run relationship between inflation and unemployment for USA. Different MS-VAR models were estimated and the best model was selected based on AIC and LR test. When the transition probabilities are taken into account, important asymmetries in inflation, GDP and unemployment were recognized. The changes in the behavior of the variables were detected with MS-VAR models. The results highlighted the importance of economy policy on economic growth.

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Keywords: New Monetarism; Phillips Curve; MS-VAR

1. Introduction

One of the main factors for the emergence of New Monetarist Phillips Curve can be complex financial arrangements promulgated by the USA since 1980s. These financial arrangements are based on weak theoretical foundations, creating excessive risk and are far from being transparent. On the other hand, the central bank policies applied since the early 1980s, globalization, the worldwide realignment of production centers, the Internet and the development of technology has a significant share of the decline in inflation. If the supply of cheap goods from China is taken into consideration; the cheaper liquidity due to decreases in inflation led to an increase in asset prices instead of rising consumer prices. At the same time, the low inflation stood up to put an end to the ongoing economic fluctuations and has led the expansion phase to the last two decades, has increased the financial liquidity

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but the current monetary control measures failed to supervise the increases in liquidity (Parasiz, 2013, 449). Under these circumstances, the economic conditions that enabled intense liquidity creation together with low inflation and stable growth are called as the Great Moderation. All the aforementioned economic conditions and transformations have the largest share in the emergence of New Monetarism.

The New Monetarist Phillips Curve which is different from the traditional monetarist, new classical and new Keynesian Phillips curves, aims to reinterpret the behavior of inflation and unemployment.

Monetarist theory, which articulates the concept of expectation into Phillips Curve, accepts an inverse relationship between inflation and unemployment in the short run. However, based on adaptive expectation theory, this inverse relationship is a temporary phenomenon caused by unexpected inflation. In the log term, inflation returns back to the natural rate of unemployment, consistent with steady-state inflation rate.

New Classical Phillips Curve is a curve based on rational expectations framework which is developed by Lucas. It is a theory of inflation and employment as a response to adaptive expectations theory, is based on Sargent and Wallace model in 1970s in the context of rational expectations, implying the assumption of “self-correcting” individuals. In this sense, the inverse relationship between inflation and unemployment is applicable only in the short run for certain conditions.

New Keynesian Phillips Curve structurally analyses the factors determining the inflation dynamics against Lucas critique. The expectation structure of New Keynesian Phillips Curve depends not only the current output gap, at the same time both the past expectations for the current output and the growth rate of current output gap. The main idea behind the New Keynesian Phillips Curve is the real effects of nominal shocks is lower when the inflation rate is high and is higher when the inflation rate is low. High average inflation reduces the impacts of rigidities and stickiness by increasing the frequency of wage and price setting. In this regard high inflation lowers the real effects of nominal shocks by causing neutrality.

The aim of this study is testing the New Monetarist Phillips Curve for the USA in the context of the study by Wong (2011), within the framework of Markov regime switching models. The MS-VAR approach is superior to other methods by not only avoiding to split the sample period into sub periods, but also the structural change of the link between inflation and unemployment is taken into account.

This study is comprised of six sections. Following the introduction section, the theoretical foundations for the New Monetarist Phillips Curve will be explained in the second section. The third part is the literature part giving the details of the empirical studies investigating Phillips curve relationship in a nonlinear manner. Data and econometric methodology and econometric results are the fourth and fifth sections. Last part is conclusions.

2. New Monetarist Phillips Curve

In the past economic cycle was controlling the harmony of financial markets, today it is observed that this relationship is almost reversed as the amount of liquidity, which is nearly twenty times more than global GDP, is taken into consideration. In other words, financial markets are determining the harmony of the real economy.

New Monetarist based models aim to create micro foundations for macro models. In this context, the markets are divided into different segments and the changes in these segments caused by liquidity effects due to changes in monetary policy and liquidity changes’ short/long term effects over labor markets and inflation are discussed. The best known studies examining the New Monetarist Phillips Curve are Wong (2011), Berentsen, Menzio ve Wright (2011), Lagos and Wright (2005).

The liquidity effect of monetary policy can be explained as a transparent shock on monetary growth increases the liquidity of companies to pay for more workers, hence they enter into a quest to find workers. In other words, the liquidity effect of monetary policy over markets is a re-allocation of liquidity based on market segmentation. When