Relationship between article and macroeconomics concepts economics essay

Economics

Prepared for: Jérémy RogerPrepared by: Abdolaziz Mehravaran2013Contents

Part 1: Summary

This article examines the empirical relationship between inflation uncertainty and unemployment rates. Beyond the short run through inflation uncertainty, Milton Friedman (1977) proclaims that inflation and unemployment have a positive relationship. For instance, high inflation will cause higher inflationary uncertainty, then high uncertainty may increase the unemployment rate. As discussed in this paper, before 1974, inflation uncertainty and unemployment were independent. Researches show that, the relationship between inflation uncertainty and unemployment is the recent phenomenon started from 1974. Moreover, researchers found that there is a break point in the relationship between inflation uncertainty and unemployment. Finally, studies show a positive inflation uncertainty-unemployment relationship and there is inflation forecast errors as well. To measure an inflation uncertainty, Evans (1991) has constructed a model which allows for time variation in the data generating process governing inflation. This model that generates estimates of the conditional variance of inflation is ARCH model. Two sources of uncertainty encompasses by the time-varying parameter ARCH model. First, uncertainty may be traced to inflation forecast errors. And second, uncertainty may be attributed to changes in the structure governing inflation which is captured by including time variation. To examine the relationship between inflation uncertainty and unemployment rate, Data is obtained from the Citibase data file. Monthly, seasonally adjusted unemployment rates are used. Single digit industry unemployment rate data include total nonagricultural, mining, construction, durable goods manufacturing,

nondurable goods manufacturing, transportation and public utilities, wholesale and retail trade, and finance and service. The results showed that there is no evidence of an inflation uncertainty-unemployment relationship before the mid-1970s. For total nonagricultural unemployment, there is a significant inflation uncertainty-unemployment relationship, and the impact of uncertainty is substantial. The empirical results demonstrate that the relationship between unemployment and inflation uncertainty depends on the sample period and the industries under examination.

Part 2: Relationship between Article and Macroeconomics concepts

In the late 1990s, unemployment in the United States fell to extremely low levels - the lowest in 30 years. Yet, in stark contrast to prior experience, inflation had not risen. In fact, it fell slightly. This pleasant conjunction of events, which was nearly unprecedented in U. S. history, set many people talking about a glorious " New Economy" in which there was no longer any trade-off between inflation and unemployment.

Inflation:

The inflation between two points in time is defined as the percentage increase of the price index between these two points in time.

Comments:

Price index is calculated at a particular point in time, inflation over a time period, typically one yearInflation may just as well be defined as the percentage change in the price level. Inflation is independent of which year we use as our base year for our price index. You often hear that inflation is

the " percentage change in prices" but keep in mind that " prices" is then set for the price level. Since the price level may be defined in many different ways (using different goods and different weights in the basket), inflation may be defined in many different ways. If the price index decreases between two points in time we say that the inflation is negative or that we have deflation.

Unemployment:

Definition:

Unemployment classification:

Economists sometimes distinguish between different types of unemployment, there are many different Ways of classifying unemployment but the following is quite common. Frictional unemployment: Individuals that are temporarily unemployed while transiting between jobs or just entering the labor market. This kind is typically short in duration but always present in a market economyStructural unemployment: Individuals that are unemployed because their skills are no longer in demand where they live. This kind typically leads to longer spells and may require the unemployed to acquire training or to moveCyclical unemployment: Unemployment due to a recession. Classical unemployment: Unemployment due to real Wages being too high (for example through minimum Wage laws)

Demand-side inflation:

Initially, the economy is at point X0, where aggregate demand curve D0 intersects the aggregate supply curve S0. Then something happens to increase spending, and the aggregate demand curve shifts horizontally to

D1. The new equilibrium is at point X1, where both prices and output are higher than they were at X0. Thus, the economy experiences both inflation and increased output. The slope of the aggregate supply curve measures the amount of inflation that accompanies any specified rise in output and therefore calibrates the trade-off between inflation and economic growth.

Supply-side inflation:

Inflation does not always come from the demand side. As can be seen in below figure, the aggregate supply curve shifts inward from S0 to S1, and the economy’s equilibrium consequently moves from point X0 to point X1. Prices rise as output falls.

Real GDP

Price Level

S0

S1

X1

X2

D0

Real GDP

Price Level

S0

S1

X0

X1

D0

Therefore, although inflation can originate from either the demand side or the supply side of the economy, a crucial difference arises between the two sources. Demand-side inflation is normally accompanied by rapid growth of real GDP, whereas supply-side inflation is normally accompanied by stagnant or even falling GDP. Faster growth of real output naturally means faster growth in the number of jobs and, hence, lower unemployment. Conversely, slower growth of real output means slower growth in the number of jobs and, hence, higher unemployment. So we conclude that if business fluctuations emanate from the demand side, unemployment and inflation should move in

opposite directions. Unemployment should fall when inflation rises high and rise when inflation falls. About 50 years ago, the economist A. W. Phillips plotted data on unemployment and the rate of change of money wages (not prices) for several extended periods of British history and then sketched a curve from that data that nowadays called Phillip Curves. As can be seen from figure below demonstrated by Phillips, unemployment rate has negative relationship with inflation. It means that when wage inflation normally is high, unemployment is low and is low when unemployment is high. The Phillips curve was thought to measure the quantitative tradeoff between inflation and unemployment. And for a number of years it seemed to work. But, something happened. The data has been gathered in 1970s to 1980 shows the different aspect.

Conclusion:

Before 1970, economists think that the inflation and unemployment have negative relationship but, as this article discussed, there is a significant positive association between inflation uncertainty and unemployment, but this relationship depends critically on three factors. First, the inflation uncertainty-unemployment relationship is not significant before the mid-1970s. Second, the inflation uncertainty-unemployment relationship does not hold across all single digit SIC industries. And third, the inflation uncertainty-unemployment relationship is concentrated at business cycle and long-run components of the data, rather than high-frequency components.