JAYOTI VIDYAPEETH WOMEN'S UNIVERSITY, JAIPUR

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Faculty of Education and Methodology

Faculty Name- JV'n Dr. Md Meraj Alam

Program- BA (Hons) Economics 2nd Semester

Course – Macroeconomics II

Digital session name – Friedman's View: The Long-Run Phillips Curve

Economists have criticised and in certain cases modified the Phillips curve. They argue that the Phillips curve relates to the short run and it does not remain stable. It shifts with changes in expectations of inflation. In the long run, there is no trade-off between inflation and employment. These views have been expounded by Friedman and Phelps' in what has come to be known as the "accelerationist" or the "adaptive expectations" hypothesis.

According to Friedman, there is no need to assume a stable downward sloping Phillips curve to explain the trade-off between inflation and unemployment. In fact, this relation is a short-run phenomenon. But there are certain variables which cause the Phillips curve to shift over time and the most important of them is the expected rate of inflation. So long as there is discrepancy between the expected rate and the actual rate of inflation, the downward sloping Phillips curve will be found. But when this discrepancy is removed over the long run, the Phillips curve becomes vertical.

In order to explain this, Friedman introduces the concept of the natural rate of unemployment. In represents the rate of unemployment at which the economy normally settles because of its structural imperfections. It is the unemployment rate below which the inflation rate increases, and above which the inflation rate decreases. At this rate, there is neither a tendency for the inflation rate to increase or decrease.

Thus the natural rate of unemployment is defined as the rate of unemployment at which the actual rate of inflation equals the expected rate of inflation. It is thus an equilibrium rate of unemployment towards which the economy moves in the long run. In the long run, the Phillips curve is a vertical line at the natural rate of unemployment.

This natural or equilibrium unemployment rate is not fixed for all times. Rather, it is determined by a number of structural characteristics of the labour and commodity markets within the economy. These may be minimum wage laws, inadequate employment information, deficiencies in manpower training, costs of labour mobility, and other market imperfections.

But what causes the Phillips curve to shift over time is the expected rate of inflation. This refers to the extent the labour correctly forecasts inflation and can adjust wages to the forecast. Suppose the economy is experiencing a mild rate of inflation of 2 per cent and a natural rate of unemployment (N) of 2 per cent. At point A on the short-run Phillips curve SPC_1 in Figure 7, people expect this rate of inflation to continue in the future.

Now assume that the government adopts a monetary-fiscal programme to raise aggregate demand in order to lower unemployment from 3 to 2 per cent. The increase in aggregate demand will raise the rate of inflation to 4 per cent consistent with the unemployment rate of 2 per cent. When the actual inflation rate (4 per cent) is greater than the expected inflation rate (2 per cent), the economy moves from point A to B along the SPC_1curve, and the unemployment rate temporarily falls to 2 per cent.

This is achieved because the labour has been deceived. It expected the inflation rate of 2 per cent and based their wage demands on this rate. But the workers eventually begin to realise that the actual rate of inflation is 4 per cent which now becomes their expected rate of inflation. Once this happens the short-run Phillips curve SPC_1 shifts to the right to SPC_2Now workers demand increase in money wages to meet the higher expected rate of inflation of 4 per cent.

They demand higher wages because they consider the present money wages to be inadequate in real terms. In other words, they want to keep up with higher prices and to eliminate fall in real wages. As a result, real labour costs will rise, firms will discharge workers and unemployment will rise from B (2%) to C (3%) with the shifting of the SPC_1 curve to SPC_2 At point C, the natural rate of unemployment is re-established at a higher rate of both the actual and expected inflation (4%).

If the government is determined to maintain the level of unemployment at 2 per cent, it can do so only at the cost of higher rates of inflation. From point C, unemployment once again can be reduced to 2 per cent via increase in aggregate demand along the SCP_2 curve until we arrive at point D. With 2 per cent unemployment and 6 per cent inflation at point D, the expected rate of inflation for workers is 4 per cent.

As soon as they adjust their expectations to the new situation of 6 per cent inflation, the short-run Phillips curve shifts up again to SPC'_3 and the unemployment will rise back to its natural level of 3 percent at point E. If points A, C and E are connected, they trace out a vertical long-run Phillips curve LPC at the natural rate of unemployment.

On this curve, there is no trade-off between unemployment and inflation. Rather, any one of several rates of inflation at points A, C and E is compatible with the natural unemployment rate of 3 per cent. Any reduction in unemployment rate below its natural rate will be associated with an accelerating and ultimately explosive inflation. But this is only possible temporarily so long as workers overestimate or underestimate the inflation rate. In the long-run, the economy is bound to establish at the natural unemployment rate.

There is, therefore, no trade-off between unemployment and inflation except in the short run. This is because inflationary expectations are revised according to what has happened to inflation in the past. So when the actual rate of inflation, say, rises to 4 per cent in Figure 7, workers continue to expect 2 per cent inflation for a while and only in the long run they revise their expectations upwards towards 4 per cent.

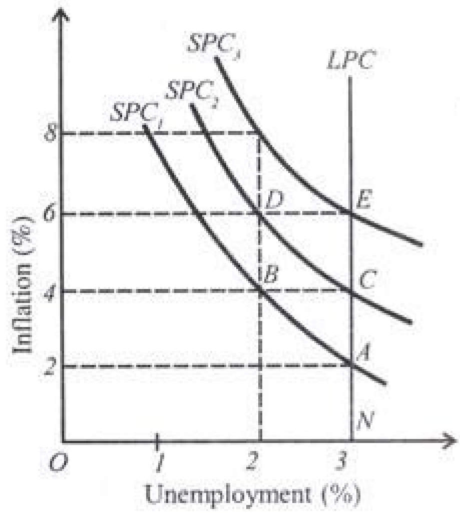

Fig. 7

Since they adapt themselves to the expectations, it is called the adaptive expectations hypothesis. According to this hypothesis, the expected rate of inflation always lags behind the actual rate. But if the actual rate remains constant the expected rate would ultimately become equal to it. This leads to the conclusion that a short run trade-off exists between unemployment and inflation, but there is no long run trade-off between the two unless a continuously rising inflation rate is tolerated.

It's Criticisms:

The accelerationist hypothesis of Friedman has been criticised on the following grounds:

1. The vertical long-run Phillips curve relates to the steady rate of inflation. But this is not a correct view because the economy is always passing through a series of disequilibrium positions with little tendency to approach a steady state. In such a situation, expectations may be disappointed year after year.

2. Friedman does not give a new theory of how expectations are formed that would be free from theoretical and statistical bias. This makes his position unclear.

3. The vertical long-run Phillips curve implies that all expectations are satisfied and that people correctly anticipate the future inflation rates. Critics point out that people do not anticipate inflation rates correctly, particularly when some prices are almost certain to rise

faster than others. There are bound to be disequilibria between supply and demand caused by uncertainty about the future and that is bound to increase the rate of unemployment. Far from curing unemployment, a dose of inflation is likely to make it worse.

4. In one of his writings Friedman himself accepts the possibility that the long-run Phillips curve might not just be vertical, but could be positively sloped with increasing doses of inflation leading to increasing unemployment.

5. Some economists have argued that wage rates have not increased at a high rate of unemployment.

6. It is believed that workers have a money illusion. They are more concerned with the increase in their money wage rates than real wage rates.

7. Some economists regard the natural rate of unemployment as a mere abstraction because Friedman has not tried to define it in concrete terms.

8. Saul Hyman has estimated that the long-run Phillips curve is not vertical but is negatively sloped. According to Hyman, the unemployment rate can be permanently reduced if we are prepared to accept an increase in inflation rate.

Course Outcome: The goal of this paper will be to expose the students to the basic principles of macroeconomics. The emphasis will be on thinking like an economist and course will illustrate how economic concepts can be applied to analyse real-life situations. In this course, the students are introduced to money and interest, theories of inflation, rate of interest, trade cycle and growth models.