

PROJECT REPORT-2

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Project Title: Inflation and unemployment trade off: An empirical analysis for low- and middle-income countries.

The relationship between wage inflation and unemployment (Phillips Curve) is debatable in economic thought, and the controversy is centred around whether there is always a trade-off or not. If this relationship is negative, it is called The Phillips Curve. Though the Phillips curve has played an important role in the decision-making process on macroeconomic policy, there have been critics who doubted the existence of the "Phillips curve". A number of studies have been done before on the existence of Phillips curve for the developed nations but there is scarcity of research when we attempt to find this trade-off for the developing nations. This paper has attempted to empirically test the existence of Phillips curve among the low- and middle-income countries. It has further attempted to test the same relationship exclusively for India too. For the purpose of the analysis data are collected for last 30 years from the World Development Indicators, World Bank. To test the hypothesis time series regression techniques are used here. This paper has found there is statistically significant relationship between inflation and unemployment as mentioned by Phillips for the developing countries. However, when the same test was conducted for a country like India, no such relationship was found.

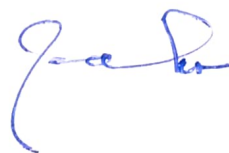
Two goals of economic policy makers are low inflation and low unemployment. But often these goals are in conflict. Many economists believe in the idea that there is a short run trade-off between inflation and unemployment. Suppose, for instance, that policy makers were to use monetary or fiscal policy to expand the aggregate demand. This policy would move the economy up along the short run aggregate supply curve to a point of higher output and a higher price level. Higher output

means lower employment, because firms employ more when they produce more and higher price level, given the previous year's price level, means higher inflation. Thus, when the policy makers move the economy up along the short run supply curve, they reduce the unemployment rate and raise the inflation rate. Conversely, when the aggregate demand is contracted by the policy makers and they move down the aggregate supply curve, unemployment rises and inflation falls. This trade-off between inflation and unemployment is called the Phillips curve.


For developing countries policy makers face a heavy problem of unemployment. Reducing unemployment in their economy is an important macroeconomic objective for them. But according to Phillips Curve if they try to reduce this unemployment they will surely face a problem of inflation arises. That's why it is very important to find out whether the Phillips Curve theory exists for developing nations or not, mainly those where there is a huge amount of excess unemployed resources. In those countries if government increases its expenditure to reduce unemployment whether output expansion will cause a inflationary problem that's a debatable macroeconomic issue. The reason behind this is reduction in unemployment is not the only concern here as output will also increase, so the inflationary tendency according to Phillips may not hold for this case. For reasons whether the Phillips Curve is applicable for the developing nations or not that's a theoretical debate.

This paper attempted to study the nature of relationship between inflation and unemployment in low- and middle-income countries.

The relationship between wage inflation and unemployment (Phillips Curve) is debatable in economic thought, and the controversy is centred around whether there is always a trade-off or not. For developing countries policy makers face a heavy problem of unemployment. Reducing unemployment in their economy is an important macroeconomic objective for them. But according to Phillips Curve if they try to reduce this unemployment, they will surely face a problem of inflation arises. That's why it is very important to find out whether the Phillips Curve theory exists for developing nations or not, mainly those where there is a huge amount of excess unemployed resources. Despite the availability of



numerous studies on the Phillips curve, there is still a lack of systematic empirical analysis that examines the hypothesis in the context of a developing country as the majority of research had focused on the developed nations. In this paper we tried to observe whether this relationship holds true for low- and middle-income developing nations and especially for India. From the above observations of section-iv and section-v we found that Phillips Curve relation statistically significantly holds for low- and middle-income countries. However, for a fast-developing nation like India when we have made observations consisting data of last 30 years, we found that this Phillips Curve relationship does not hold for India.



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