Phillips curve

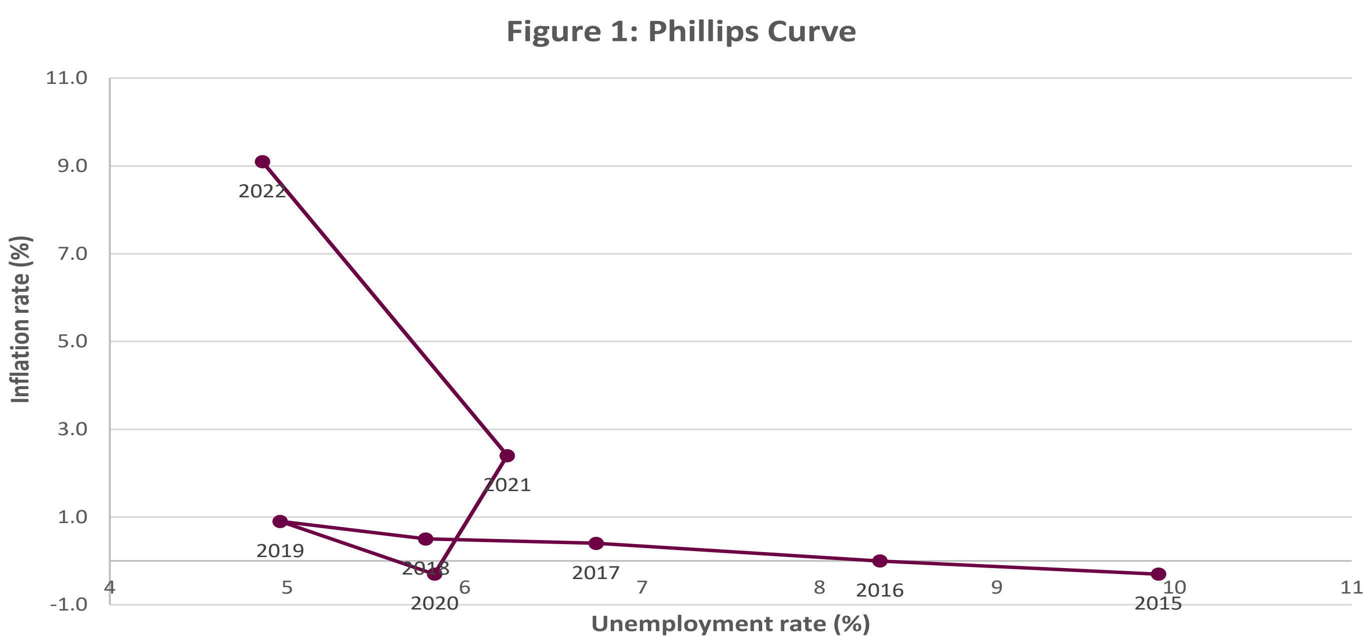
What is a Phillips Curve? Introductory note

The Irish inflation rate hit a 40-year high of 9.6%[1] in July 2022. Simultaneously the economy has reduced unemployment to 4.2%[2], with many firms reporting difficulty in attracting new workers. To show the relationship between inflation and unemployment economists often point to a Phillips Curve, a concept first developed in the 1950s. The PBO have prepared this short note to explain this and why it is relevant.

The Phillips curve shows the inverse relationship between inflation and the unemployment rate. This means the higher an economy's inflation rate, the lower the unemployment rate, and vice-versa. The rationale behind the curve is that if labour demand increases, the pool of unemployed workers subsequently decreases, and companies increase wages to attract more workers. Companies pass on increased costs (higher wages) to consumers in the form of price increases, creating inflation. On the other hand, if labour demand falls then unemployment rises. The increase in unemployment reduces spending power and subsequently reduces demand for goods, leading to a decline in inflation.

Figure 1 compares the inflation rate with the seasonally adjusted unemployment rate for Ireland from 2015 to June 2022. In 2017, inflation was low at near 0% but the unemployment rate was high at 8.34%. So far in 2022 we have seen the opposite, inflation is high at 9.1% while unemployment is low at 4.86%. Energy is the single biggest contributing factor to inflation. Energy prices are estimated to have risen by 54%[3] in Ireland and 41.9%[4] across the Eurozone since June 2021.

Figure 1: The Phillips Curve



1 CSO (2022) Consumer Price Index
2 CSO (2022) Monthly Unemployment
3 RTE (2022) Irish inflation estimated at 9.6% in June
4 Eurostat (2022) Euro area annual inflation and its main components, June 2012 - June 2022

Source: CSO *MUM01*, CSO *CPI Table 1*.

The Phillips curve claims that with economic growth comes inflation, which in turn should lead to more jobs and less unemployment. However, the original concept has been somewhat rebutted due to the occurrence of stagflation[5] in the 1970s, when there were high levels of both inflation and unemployment.

5 Stagflation refers to an economy that is experiencing a simultaneous increase in inflation or slowdown of economic output while unemployment remains high