Box 1 Inflation, economic growth and central bank independence

The relation between inflation and central bank independence can be assessed using regression analysis (using data from Alesina and Summers, 1993). Statistical analysis produces the following result (figures in parentheses are *t*-values)

Inflation =
$$9.44 - 1.64 \times Independence \quad R^2 = 0.71$$

(13.6) (5.9)

This shows a statistically significant relation between average inflation in the industrialised countries from 1955-1988 and the independence of their central banks, whereby different frameworks for central bank independence explain 70% of the average inflation rate over the period. The statistical relation suggests that countries with the least independent central banks over the period experienced an inflation rate of just under 8% on average, while those with the most independent central banks recorded average inflation of just under 3%.

However, no comparable relation is found between central bank independence and economic growth during the period

Growth =
$$3.98 - 0.15 \times Independence$$
 $R^2 = 0.02$
(5.1) (0.5)

Thus greater central bank independence, and thereby lower inflation, does not incur the cost of lower economic growth, which is consistent with theory.