Inflation and the Nominal Interest Rate

The monetary theory of inflation predicts a close association between inflation and the nominal interest rate: an increase in the rate of inflation by 1% causes a 1% increase in the nominal interest rate.
Neutrality of Money

The basis for this relationship is the neutrality of money, the idea that money and monetary policy has no effect on real economic variables.

In particular, money and monetary policy do not affect the real interest rate.
Nominal Interest Rate

The real interest rate is the nominal interest rate minus inflation.

If the real interest rate is independent of money and monetary policy, then one obtains the relationship between the nominal interest rate and inflation.
Long-Run Relationship

The neutrality of money is a long-run relationship and is false in the short run. Hence the relationship between money and inflation and the nominal interest rate is a long-run relationship, an association found over long periods of time.