BS2551 Money Banking and Finance

Central Banking

Functions of a Central Bank

A central bank is a financial institution that is owned by the government, which has a central role of managing the currency. A typical central bank such as the Bank of England has the following function:

Issue of Currency- The Central Bank (CB) prints notes and coins for the government, which is normally backed up by the holding of government bonds.

Reserve Management- The CB manages the portfolio of foreign exchange reserves of the country and may buy or sell them to influence the exchange rate.

Banker to the Government- The CB collects tax revenue and disburses expenditure provided by the government.

Government debt management – In many developing countries, the CB often issues long term government debt.

Banking Supervisions- In many countries including the UK and Germany, the CB regulates the commercial banking system to maintain financial stability.

Maintain Financial Stability- via the lender of the last resort – provides emergency liquidity to ensure that non profit making companies do not collapse, damaging the whole economy. Examples, British Steel Industry (Corus) and North Sea Oil.

Monetary Policy function: the main topic of this lecture.

Interest Rate Control

The CB increases interest rates by purchasing government bonds. This removes liquid funds from the banking system and leads to an increase in the interest rate. This is because the public is more likely to save if there are fewer liquid investments available for them to purchase.

On the other hand if the CB wants to reduce interest rates they sell government bonds. This leads to more liquidity in the market, encouraging less saving, consequently reducing interest rates.

Often there is an administered interest rate that the CB offers to financial institutions that are short of liquidity. This is often referred to as the discount rate. Commercial banks typically pass on the administered interest rate on the form of a mortgage rate (x% above the base rate).

Central banks may focus on the control of the money supply rather then on the interest rate. The same operations are used to increase or decrease the money supply. If the CB buys bonds, less money is available in the economy and the money supply is reduced. On the other hand, if the CB sells bonds, more money is available in the economy, resulting in increased money supply.

Note: that it is impossible to control the money supply and the interest rate in isolation. A change in one is required to obtain a change in the other. In other words high inflation (increase in money supply) leads to low interest rates and vice versa.

Monetary Policy

The control that the CB has over the economy depends on future expectations and in particular on the credibility of the CB.

- If the public thinks the CB is weak, then the CB may be unable to reduce inflation expectations without the aid of a recession, because inflation will be reduced as a consequently of lost output due to high unemployment, resulting in lower public expenditure.

- If they consider the CB to be strong and effective, the fall in inflation will occur quickly and smoothly with very minor consequences for economic growth.

To enhance CB credibility, many nations such as the UK and Germany have made them independent of the government and given them specific monetary targets to control for inflation.

CB's also have policies to communicate their intentions to the public. In other words they communicate their policies on inflation, monetary and exchange rate targeting to the public on a regular basis. For example, the Bank of England communicate their monetary policy objectives to the public once a month.

Inflation Targeting

Since 1992, the Bank of England has the monetary policy objective to control the level of inflation. In the UK the monetary policy target for the CB is to keep inflation at 2.5% (allowing for a 1% deviation from the target), as measured by the 12 month increase in the Consumer Price Index (CPI).

The Bank of England then makes monthly inflation forecasts looking two years into the future to analyze whether interest rates need to be adjusted to ensure that inflation remains within the region of the pre-determined target. They focus upon a 2 year forecast horizon, because that it is duration required to capture the entire impact of interest rates on inflation.

Monetary Targeting

The easiest method to control inflation is to control the money supply. If the velocity of money in the economy is controlled then by definition inflation is controlled.

The CB requires a velocity of money that is (a) controllable and (b) keeps inflation at a reasonable level. In a stable financial system such a relationship works quite well and a target of monetary growth can result in low inflation.

The problem is that monetary targeting is difficult when a financial system is changing. Money may grow rapidly due to portfolio reallocation between types of bank accounts (e.g. changing mortgage companies) rather then having any implication for inflation. This was the issue with the UK in the 1980's which led them to abandon monetary policy targeting.

Problems of monetary policy

Monetary policy works well because it controls inflation via the demand side of the economy. The situation becomes more difficult when inflation is due to factors that are independent of demand (e.g. oil prices), called a supply shock. These are likely to lower growth and increase inflation simultaneously.

There are lags in monetary policy. These are due to implantation (realization of a problem and a policy shift) and impact lags (the duration of the full impact of the policy shift to the economy). This implies that by the time the policy has an effect the economic situation may have changed.

There is an important interaction between monetary and fiscal policy. If the government runs a large budget deficit the CB can accommodate the deficit by reducing interest rates, which may lead to inflation, or not accommodate which may restrict growth (since government borrowing raises borrowing rates and "crowds out" private sector borrowers.)

Asset prices and monetary policy: If there is a rise in house prices that does not affect general inflation, how should the central bank react? The danger is that it allows a bubble to form, then inflation will eventually occur, and also recession when the bubble bursts.

Credit Crunch- CB monetary policy may not succeed in reviving the economy if the banks cannot lend due to inadequate capital.