Lesson 1: Monetary Policy (Part I)

Monetary and Fiscal Policy

Monetary policy refers to the government's or central bank's manipulation of money supply to influence the quantity of money and credit in the economy.

Fiscal policy refers to the government's use of spending and tax policies to influence various aspects of the economy, including:

- The level of aggregate demand and therefore, overall economic activity.
- The distribution of wealth.
- The allocation of resources between different subsectors and economic agents.

The Functions of Money

Medium of exchange: In order to effectively serve as a medium of exchange, money must have the following qualities:

- It must be readily acceptable.
- It must have known value.
- It must be easily divisible.
- It must have a high value relative to its weight.
- It must be difficult to counterfeit.

Store of value: Money is more liquid than most other stores of value because, as a medium of exchange, it is readily accepted everywhere.

Unit of account: Money also functions as a unit of account, providing a common measure of the value of goods and services being exchanged.

Paper Money and the Money Creation Process

Definitions of Money

Money may be defined as any medium (e.g. notes and coins) that can be used to purchase goods and services.

- Monetary authorities in most countries use a variety of measures of money.
- Generally speaking however, the stock of money consists of notes and coins in circulation, plus deposits in banks and other financial institutions that can readily be used to purchase goods and services in the economy.
- Economists focus on the rate of growth of narrow money and broad money.
    - Narrow money refers to notes and coins in circulation plus other highly liquid deposits.
    - Broad money includes narrow money plus the entire range of liquid assets that can be used to make purchases.

Note:

- Checking account balances are included in measures of money.
- Cheques make transfers of money possible but this does not make the cheque itself money.
- Credit cards are not money either.

The Quantity Theory of Money

The quantity theory of money expresses the relationship between money and the price level.

The quantity equation of exchange states that: MV = PY

Money neutrality says that an increase in money supply will not result in an increase in real output (Y).

- Therefore, an increase in money supply will cause the aggregate price level (P) to rise.
- The assertions of the quantity theory of money are in line with the consequences of money neutrality.

Monetarists use the quantity theory of money to support their belief that inflation can be controlled by manipulating the money supply growth rate.

The Demand for Money

Transactions-related demand for money arises from the need to use money to finance transactions.

- Generally speaking, transactions-related demand for money is positively related to average transaction size and overall GDP.
- Note that the ratio of transactions balances to GDP has not changed significantly over time.

Precautionary money balances are held for use in unforeseen circumstances.

- Precautionary balances are positively related to average transactions size, total volume of transactions and therefore to overall GDP as well.

Speculative or portfolio demand for money is related to perceived opportunities and risks of holding other financial instruments (such as bonds).

- Speculative demand for money is inversely related to the returns available on other financial assets.
- It is positively related to the perceived risk in these financial assets.

Supply and Demand for Money

The Fischer Effect

The Fischer effect is directly related to the concept of money neutrality.

- It states that the nominal interest rate (R_N) reflects the real interest rate (R_R) and the expected rate of inflation (Π^e).
- $R_n = R_r + \Pi^e$

One factor that does influence the nominal interest rate, but is not considered by the Fischer effect is uncertainty.

- The greater the uncertainty, the higher the required risk premium.

The Roles of the Central Bank

Monopoly supplier of currency:

- Central banks have the responsibility of safeguarding the value of fiat currencies and maintaining confidence in them.
- If central banks increase the supply of money irresponsibly, the currency will lose its value.

Banker to the government (and to other banks) and lender of last resort:

- The central bank stands ready to supply funds to banks when they face reserve shortfalls.
- This support, along with government bank deposit insurance, promotes confidence in banks.

Supervise the banking system.

Regulate and set the standards for a country's payments system.

Manage the country's foreign currency and gold reserves.

Conducting monetary policy

Objectives of Monetary Policy

The U.S. Federal Reserve (Fed) states that the nation's monetary policy should promote:

- Maximum employment.
- Stable prices.
- Moderate long-term interest rates.

Other central banks around the world also perform many different roles and have multiple objectives, but generally speaking, the overarching objective of most central banks is to maintain price stability.

Costs of Inflation

Expected inflation is the inflation rate that economic agents expect to see in the economy in the future.

- Menu costs: Costs of repeatedly changing advertised prices of goods and services.
- Shoe leather costs: These represent the time and effort put in by people to deal with the effects of inflation, such as holding less cash on hand and making frequent trips to the bank when in need of cash.

Expected or anticipated inflation is reflected in all long-term contracts. Effectively, when inflation is expected, it becomes a self-fulfilling prophecy.

Unexpected inflation is the level of inflation that comes as a surprise to economic agents. It is arguably more costly than expected inflation. In addition to the costs of expected inflation, unexpected inflation also leads to:

- Inequitable transfers of wealth.
- Higher risk premia in borrowing rates
- A reduction in the information content of market prices