



## Fiscal Policy Basics

### Overview of Fiscal Policy

**Definition:** Fiscal policy involves the use of government spending and taxation to influence the economy.

**Goals:** Achieve macroeconomic objectives such as full employment, stable prices, and economic growth.

**Key Tools:**

- Government Spending (G)
- Taxation (T)
- Transfer Payments

### Types of Fiscal Policy

<b>Expansionary Fiscal Policy</b>	Increases government spending and/or decreases taxes to increase aggregate demand (AD) and stimulate economic growth. Used during recessions. <b>Example:</b> Tax cuts or increased infrastructure spending.
<b>Contractionary Fiscal Policy</b>	Decreases government spending and/or increases taxes to decrease AD and control inflation. Used during periods of high inflation. <b>Example:</b> Increased taxes or reduced government programs.
<b>Neutral Fiscal Policy</b>	Maintains the current levels of government spending and taxation. No significant impact on AD.

### Fiscal Policy Multipliers

**Government Spending Multiplier:** The ratio of the change in real GDP to the initial change in government spending.

Formula:  $\frac{1}{1 - MPC}$  where MPC is the marginal propensity to consume.

**Tax Multiplier:** The ratio of the change in real GDP to the initial change in taxes.

Formula:  $-MPC / (1 - MPC)$

**Balanced Budget Multiplier:** The effect on aggregate demand (and hence equilibrium output) of equal increases in government spending and taxation. This multiplier is equal to 1.

## Monetary Policy Fundamentals

### Introduction to Monetary Policy

**Definition:** Monetary policy involves actions undertaken by a central bank to manipulate the money supply and credit conditions to stimulate or restrain economic activity.

**Primary Goal:** Price stability (controlling inflation), but also aims for full employment and sustainable economic growth.

### Tools of Monetary Policy

<b>Open Market Operations (OMO)</b>	Buying and selling government securities (bonds) to influence the money supply and interest rates. Buying bonds increases the money supply; selling bonds decreases it.
<b>Reserve Requirements</b>	The fraction of a bank's deposits that they are required to keep in their account at the central bank or as vault cash. Increasing reserve requirements decreases the money supply; decreasing them increases it.
<b>Discount Rate</b>	The interest rate at which commercial banks can borrow money directly from the central bank. Increasing the discount rate decreases the money supply; decreasing it increases it.
<b>Interest on Reserves (IOR)</b>	The interest rate the central bank pays commercial banks on the reserves they hold at the central bank. Raising the IOR tends to decrease lending; lowering it increases lending.
<b>Quantitative Easing (QE)</b>	Involves a central bank injecting liquidity into money markets by purchasing assets without the goal of lowering the policy interest rate. It is often used when interest rates are near zero.

### Types of Monetary Policy

<b>Expansionary Monetary Policy</b>	Increases the money supply and lowers interest rates to stimulate economic activity. Used during recessions or periods of low growth.
<b>Contractionary Monetary Policy</b>	Decreases the money supply and raises interest rates to curb inflation. Used when inflation is high.

## Effects and Considerations

### Impact of Fiscal Policy

<b>Expansionary Fiscal Policy Effects</b>	<ul style="list-style-type: none"><li>Increases aggregate demand and output.</li><li>Reduces unemployment.</li><li>May lead to inflation if the economy is near full capacity.</li><li>Can increase government debt.</li></ul>
<b>Contractionary Fiscal Policy Effects</b>	<ul style="list-style-type: none"><li>Decreases aggregate demand and output.</li><li>Increases unemployment.</li><li>Reduces inflation.</li><li>Can decrease government debt.</li></ul>

### Impact of Monetary Policy

<b>Expansionary Monetary Policy Effects</b>	<ul style="list-style-type: none"><li>Lowers interest rates, encouraging borrowing and investment.</li><li>Increases aggregate demand and output.</li><li>Can lead to inflation if the money supply grows too rapidly.</li><li>May lead to asset bubbles.</li></ul>
<b>Contractionary Monetary Policy Effects</b>	<ul style="list-style-type: none"><li>Raises interest rates, discouraging borrowing and investment.</li><li>Decreases aggregate demand and output.</li><li>Reduces inflation.</li><li>Can slow economic growth.</li></ul>

### Limitations and Challenges

<b>Fiscal Policy Limitations:</b> <ul style="list-style-type: none"><li><b>Lags:</b> Implementation and impact lags can reduce effectiveness.</li><li><b>Crowding Out:</b> Government borrowing can increase interest rates and reduce private investment.</li><li><b>Political Constraints:</b> Difficult to implement unpopular policies (e.g., tax increases).</li></ul>
<b>Monetary Policy Limitations:</b> <ul style="list-style-type: none"><li><b>Zero Lower Bound:</b> Interest rates cannot fall below zero, limiting the effectiveness of expansionary policy during severe recessions.</li><li><b>Liquidity Trap:</b> Lowering interest rates may not stimulate borrowing if confidence is low.</li><li><b>Time Lags:</b> Monetary policy actions take time to impact the economy.</li></ul>
<b>Global Interdependence:</b> Policies in one country can affect other countries, complicating policy decisions.

## Key Economic Indicators

### Major Economic Indicators

<b>Gross Domestic Product (GDP):</b> The total value of goods and services produced in an economy. Indicates the size and health of the economy.
<b>Inflation Rate:</b> The rate at which the general level of prices for goods and services is rising, and subsequently, purchasing power is falling. Central banks target specific inflation rates.
<b>Unemployment Rate:</b> The percentage of the labor force that is unemployed. Indicates the level of joblessness in the economy.
<b>Consumer Price Index (CPI):</b> A measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.
<b>Producer Price Index (PPI):</b> A measure of the average change over time in the selling prices received by domestic producers for their output.

### Understanding the Phillips Curve

<b>Phillips Curve:</b> A historical inverse relationship between rates of unemployment and corresponding rates of inflation in an economy. <ul style="list-style-type: none"><li><b>Short-Run Phillips Curve (SRPC):</b> Shows the trade-off between inflation and unemployment in the short run.</li><li><b>Long-Run Phillips Curve (LRPC):</b> A vertical line at the natural rate of unemployment, indicating that there is no long-run trade-off between inflation and unemployment.</li></ul>
Changes in inflationary expectations can shift the SRPC.

### The Role of Expectations

<b>Rational Expectations:</b> The idea that people make decisions based on their expectations of the future, which are based on all available information. <ul style="list-style-type: none"><li>Can reduce the effectiveness of policy interventions if people anticipate and counteract them.</li></ul>
<b>Adaptive Expectations:</b> The idea that people form their expectations of the future based on past trends. <ul style="list-style-type: none"><li>Can lead to persistent errors in forecasting the future.</li></ul>