

## **Fiscal Stimulus**

A **fiscal stimulus** is the use of fiscal policy to increase production and employment.

Fiscal stimulus can be either

- Automatic
- Discretionary

**Automatic fiscal policy** is a fiscal policy action triggered by the state of the economy with no government action.

**Discretionary fiscal policy** is a policy action that is initiated by an act of Parliament.

## Automatic Fiscal Stimulus

Two items in the government budget change automatically in response to the state of the economy.

- Tax revenues
- Transfer payments

Let's look at how tax revenues automatically responds to the state of the economy.

$$\text{Tax Revenue} = \text{Tax rate} \times \text{Income}$$

- Tax revenue depends on tax rates and incomes.
- Parliament sets the tax rates that people must pay.
- Let us suppose that the tax rate is constant – that is, flat tax rate.

$$\text{Tax Revenue} = \text{Tax rate} \times \text{Income}$$

<http://www.cra-arc.gc.ca/tx/ndvdl/fq/txrts-eng.html>

Canadian Federal tax rates for 2015

- 15% on the first \$44,701 of taxable income, +
- 22% on the next \$44,700 of taxable income (on the portion of taxable income over \$44,701 up to \$89,401), +
- 26% on the next \$49,185 of taxable income (on the portion of taxable income over \$89,401 up to \$138,586), +
- 29% of taxable income over \$138,586.

## **Discretionary Fiscal Stimulus**

Most discretionary fiscal stimulus focuses on its effects on aggregate demand.

Changes in government expenditure and taxes change aggregate demand and have multiplier effects.

Two main fiscal multipliers are

- Government expenditure multiplier
- Tax multiplier

The **government expenditure multiplier** is the quantity effect of a change in government expenditure on real GDP.

Because government expenditure is a component of aggregate expenditure, an increase in government expenditure increases real GDP.

When real GDP increases, incomes rise and consumption expenditure increases. Aggregate demand increases.

The **tax multiplier** is the quantity effect of a change in taxes on aggregate demand.

The demand-side effects of a tax cut are likely to be smaller than an equivalent increase in government expenditure.

## Time Lags

The use of discretionary fiscal policy is also seriously hampered by three time lags:

- Recognition lag—the time it takes to figure out that fiscal policy action is needed.
- Law-making lag—the time it takes Parliament to pass the laws needed to change taxes or spending.
- Impact lag—the time it takes from passing a tax or spending change to its effect on real GDP being felt.