Macroeconomic Policy in an Open Economy

Macro Economic Objectives

internal balance

    fully employed economy (e.g. unemployment rate = 4%)

    reasonable amount of inflation (inflation rate = 2%)

external balance – balance on current account is zero

overall balance – both internal and external balance

Macro Economic Policies

fiscal policy – government changes spending and taxation. The reduction in taxation stimulates consumption spending. Increased government borrowing can affect the interest rate.
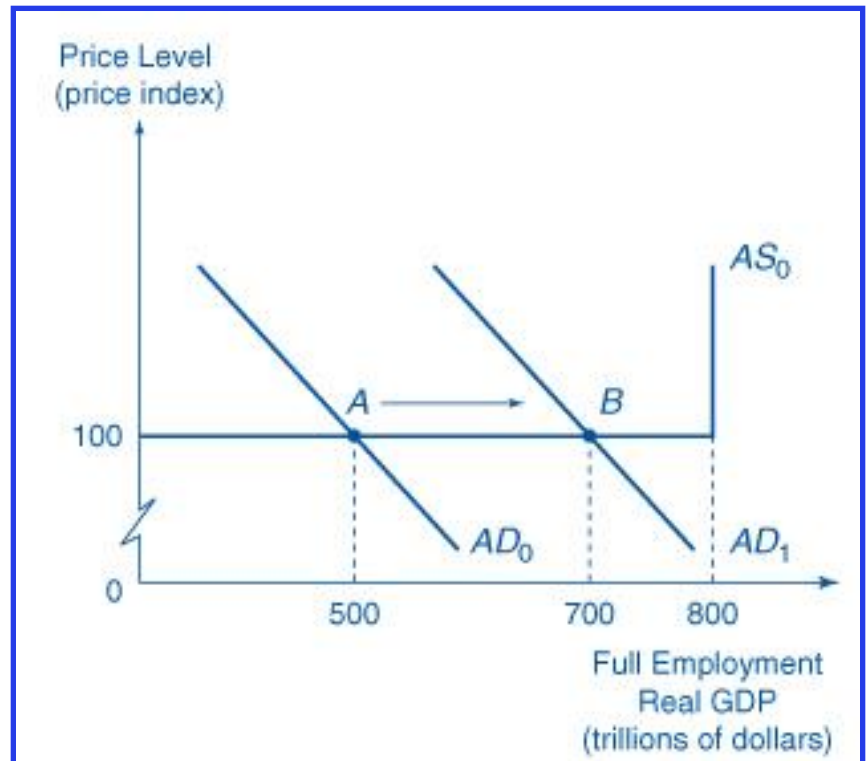
monetary policy – central bank changes money supply and this affects interest rates which in turn affect investment and consumption spending

In an open economy, the interest rate changes will affect the demand for currency

Expansionary Macro Policy in a Closed Economy

- Increase money supply

- Decrease taxes and/or increase government spending

Expansionary policies operate to increase aggregate demand (from AD_0 to AD_1) in the short run and this will increase the level of output (500 to 700) through a multiplier. The size of the multiplier will be reduced to the extent that other spending is "crowded out" by the expansionary macro economic policy.
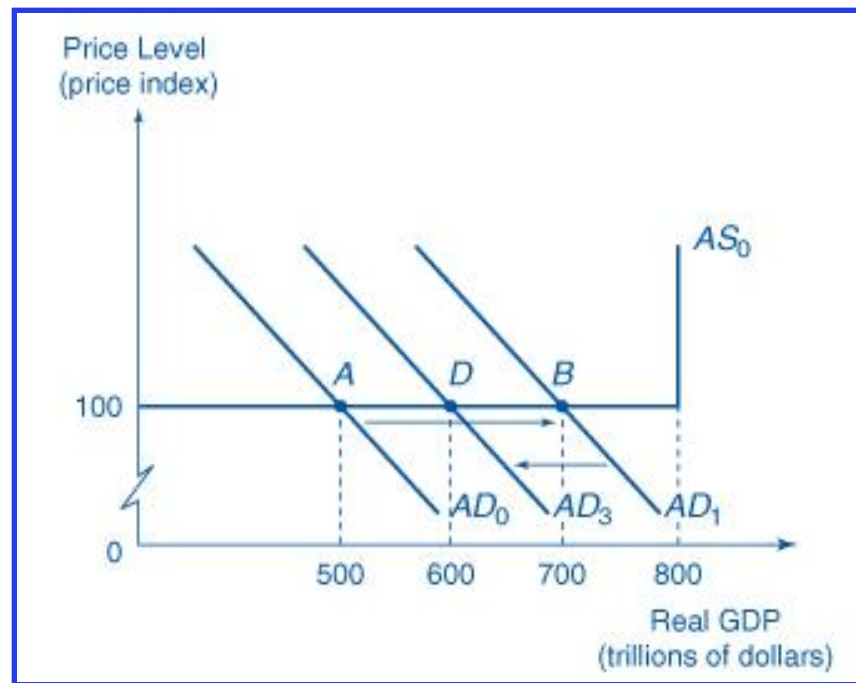
Closed Economy (no exchange rate or trade sector)
starting with less than full employment - short run effects

Fiscal Policy (expansionary)	**G ↑ and/or T ↓**	**G and C ↑**	**Y ↑ by a multiplier times the change in (C+I+G) C↑, G↑, but I↓**
		Gov't Borrowing ↑ → int rate ↑ → Investment ↓ (this is called "crowding out")	
Monetary Policy (expansionary)	**M ↑**	**int rate ↓ → Investment ↑ and C ↑**	**Y ↑ by multiplier times the change in (C+I) C↑, I↑**

Expansionary Fiscal Policy with Floating Exchange Rates

- initial effect is move from AD_0 to AD_1
- greater deficit leads to increased interest rates
- causes inflow of foreign investment
- increased demand for domestic currency

- appreciation leads to decline in net exports. This is a type of "crowding out".
- this reduces the impact of fiscal policy

Open Economy (<u>floating exchange rate</u>, <u>free capital flows</u>)

starting with less than full employment - short run effects

Fiscal Policy (expansionary)	**G ↑ and/or T ↓**	**G and C ↑**	**Y ↑ by multiplier times the change in (C+I+G + NX)** Note that NX is down so this policy has less impact than in a closed economy
		Gov't Borrowing ↑ → int rate ↑ → increased demand for currency →currency appreciation→Net exports↓ (this is called "crowding out")	
Monetary Policy (expansionary)	**M ↑**	**int rate ↓ → decreased demand for currency →currency depreciation→Net exports ↑**	**Y ↑ by multiplier times the change in (C+I+NX)) Note that NX is up so this policy has a larger impact than in a closed economy**

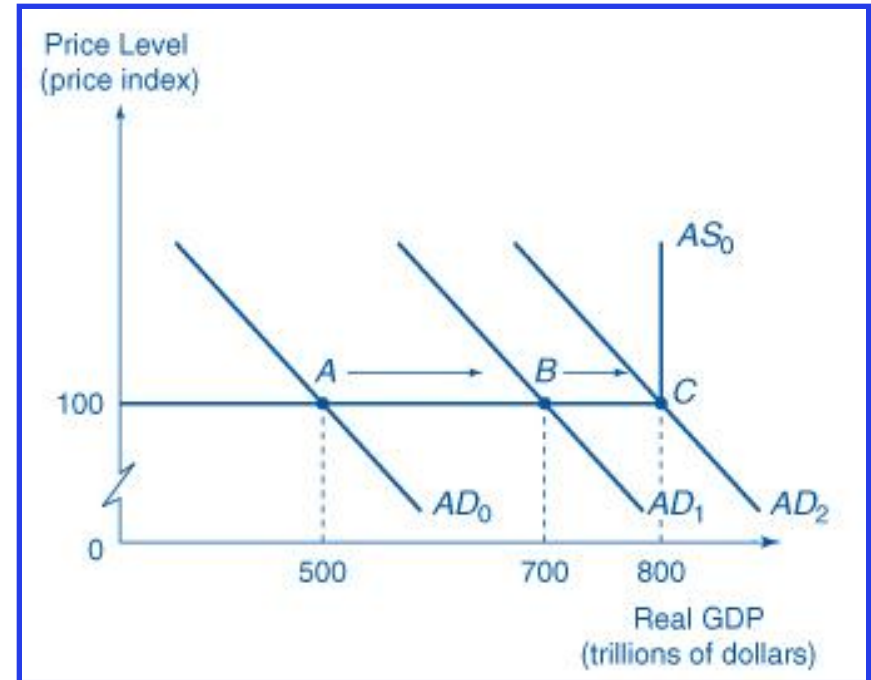# Expansionary Fiscal Policy with Fixed Exchange Rates

Primary Effect (AD0-AD1)
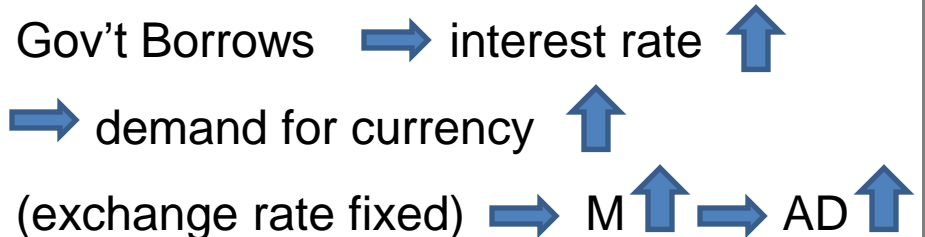
Increased domestic spending (from G up or T down)

Secondary Effect (AD1-AD2)

Increased government borrowing increases domestic interest rates. This increases foreign demand for the currency and upward pressure on the exchange rate. To maintain the fixed exchange rate, the money supply must increase, and this causes an additional increase in aggregate demand

Secondary Effect

Gov't Borrows ⟹ interest rate ⬆

⟹ demand for currency ⬆

(exchange rate fixed) ⟹ M ⬆ ⟹ AD ⬆

Open Economy (<u>fixed exchange rate</u>, <u>free capital flows</u>)

starting with less than full employment - short run effects

Fiscal Policy (expansionary)	**G ↑ and/or T ↓**	**G and C ↑**	**Y ↑ by multiplier times the change in (C+I+G + NX)** Note that NX is not "crowded out" as in the floating case, so this stimulus is larger
		Gov't Borrowing ↑ → int rate ↑ → increased demand for currency →currency appreciation→M↑→monetary injection to maintain the fixed exchange rate.	
Monetary Policy (expansionary)	**M ↑**	**int rate ↓ → decreased demand for currency →currency depreciation→M↓→money supply must be increased to maintain fixed exchange rate , negating part of the initial M ↑**	**Y ↑ by multiplier times the change in (C+I+NX))** Note that NX is up so this policy has a larger impact than in a closed economy

Summary of Policy Effects

(compared to closed economy case)

	Monetary Policy	**Fiscal Policy**
Floating Exchange Rate	Strengthened	Weakened
Fixed Exchange Rate	Weakened	Strengthened

Interesting Scenarios

recession & current account deficit

o under floating exchange rate system expansionary monetary policy causes increase in GDP as well as depreciation improving current account deficit

o But expansionary fiscal policy could lead to an appreciation of the currency and a worsening of the current account deficit

Interesting Scenarios

inflation & current account deficit

o under floating exchange contractionary monetary policy limits inflation but leads to appreciation increasing current account deficit

o monetary policy cannot restore both internal and external balance