

## Deficits and the fiscal stance

- The **fiscal stance** shows the effect of fiscal policy on demand and output.
- Fiscal policy might be **expansionary** (aiming to rise national income) or **contractionary**.
- In itself, the **budget deficit** may be a poor measure of the government's fiscal stance. The deficit can change for reasons unconnected with fiscal policy. E.g. a fall in investment demand might reduce output and income and thus raise the budget deficit.

# The structural budget

- Tightening fiscal policy during a recession (to eliminate a growing budget deficit) is likely to reduce output further.
- To use the budget deficit as an indicator of the fiscal stance we calculate the structural or cyclically adjusted budget.
- The **structural budget** shows what the budget would be if output were at potential output.

# Inflation-adjusted budget

- A second reason why the actual government deficit may be a poor measure of fiscal stance is the distinction between real ( $r$ ) and nominal ( $i$ ) interest rates.
- $r = i - \pi$  ( $\pi$ : inflation)
- Official measures of the deficit treat all nominal interest paid by the government on the national debt as government expenditure.
- The inflation-adjusted budget uses real not nominal interest rates to calculate government spending on debt interest.

# Automatic stabilizers

- Suppose investment demand falls – the larger the multiplier, the larger is the fall in equilibrium output.
- A higher net tax rate ( $t$ ) reduces the multiplier  $[= 1/(1-MPC \times [1-t])]$ , and dampens the output effect of shocks to autonomous aggregate demand.
- **Automatic stabilizers** reduce the multiplier and thus output response to demand shocks.

# Discretionary fiscal policy

- Income tax, VAT, and unemployment benefit are important automatic stabilizers. At given tax rates and given benefit levels, a fall in income and output raises payments of benefits and reduces tax revenue.
- Although automatic fiscal stabilizers are always at work, governments also use discretionary fiscal policies to stabilize aggregate demand.
- Discretionary fiscal policy is decisions about tax rates and levels of government spending.
- In practice, not even active fiscal policy can **stabilize** output perfectly.

# The national debt and the deficit

- **Budget deficits** add to the **national debt**. If the debt is mainly owed to citizens of the country, interest payments are merely a transfer within the economy.
- However, the national debt may be a burden if the government is unable or unwilling to raise taxes to meet high interest payments on a large national debt.

# Should we hate budget deficits?

- Deficits are not necessarily bad.
- Particularly in a recession, a move to cut the deficit may lead output further away from potential output.
- But huge deficits can create a vicious circle of extra borrowing, extra interest payments, and yet more borrowing.

# Foreign trade

- In an open economy, **exports** are a source of demand for domestic goods but **imports** are a leakage since they are a demand for goods made abroad.
- The **trade balance** is the value of net exports.
- If these are positive, the economy has a trade surplus. If imports exceed exports, the economy has a trade deficit.

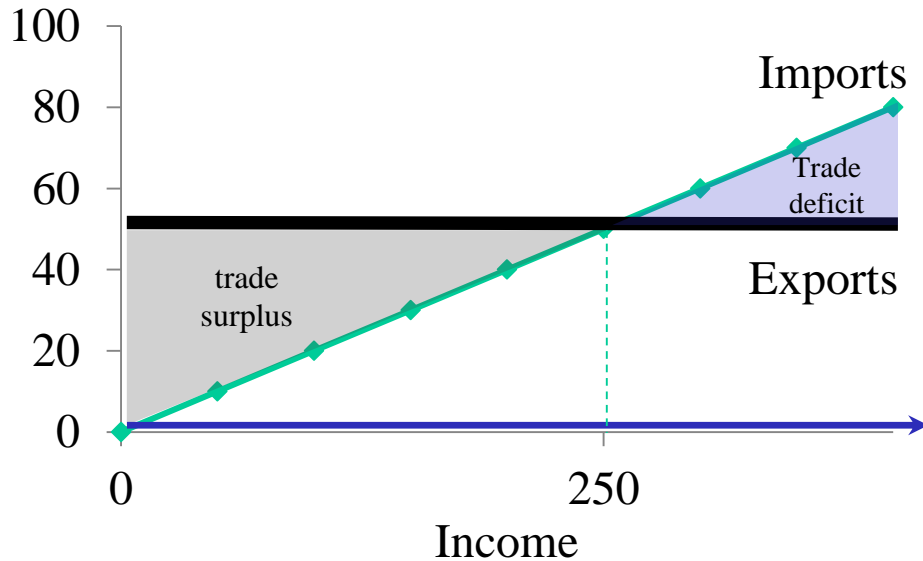
$$NX = X - Z$$



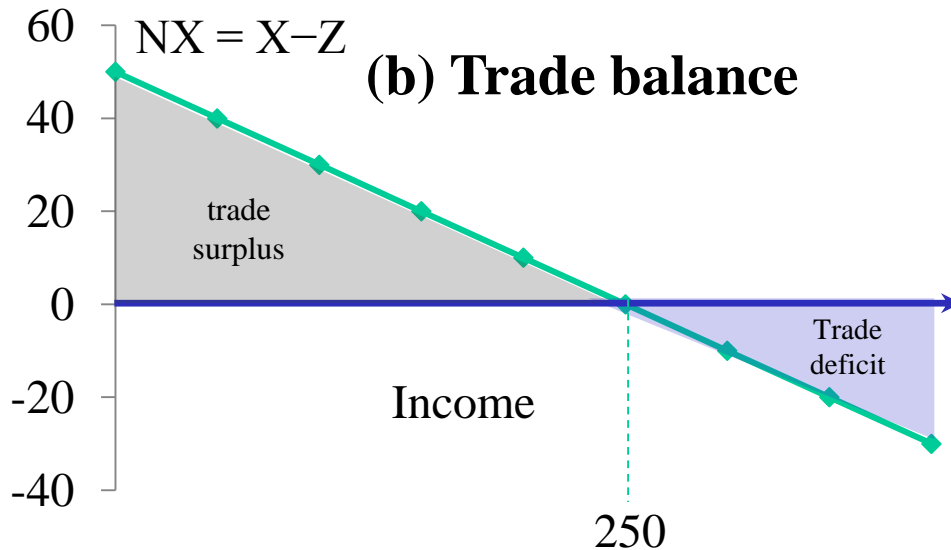
# Determinants of exports and imports

- Exports are determined mainly by conditions abroad and can be viewed as autonomous demand unrelated to domestic income.
- Imports are assumed to rise with domestic income.
- The **marginal propensity to import (MPZ)** tells us the fraction of each extra unit of national income that goes on extra demand for imports.

### (a) Exports and imports

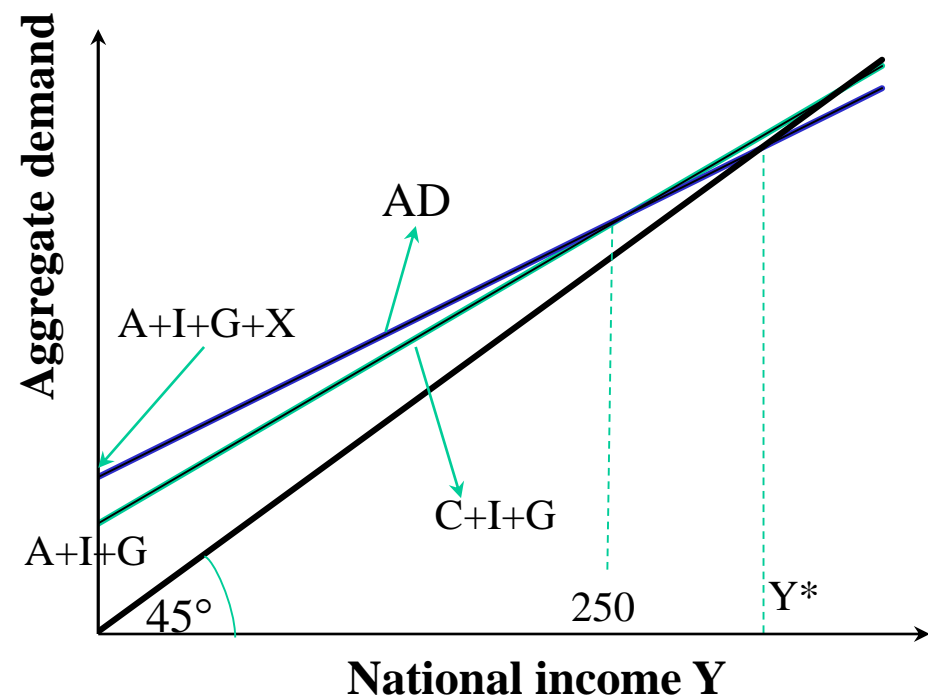


### (b) Trade balance



Part (a) shows the given level of exports at 50. Imports increase with the level of income. The diagram assumes a marginal propensity to import, shown by the slope of the import schedule of 0.2. The trade balance, the difference between the planned exports and planned imports, is zero at an income level of 250. Imports and exports both equal 50. At higher levels of income, imports exceed 50 and there is a trade deficit. The net export schedule  $X - Z$  in part (b) shows the difference between export and import demand.

# Equilibrium income in an open economy



Net exports  $(X - Z)$  must be added to  $(C + I + G)$  to get aggregate demand  $AD$ . The gap between  $(C + I + G)$  and  $AD$  is precisely the net export schedule  $(X - Z)$ . Equilibrium occurs at  $E$ , where the  $AD$  schedule crosses the  $45^\circ$  line. Here, net exports are zero at an income of 250. Thus at  $Y^*$  the  $AD$  schedule lies below  $(C + I + G)$ .

Leakages reduce the multiplier to  
 $1/[1 - MPC' + MPZ]$

$$S + NT + Z = I + G + X$$

# How foreign trade affects equilibrium output and the trade balance

- Higher export demand raises domestic output and income.
- A higher marginal propensity to import reduces domestic output and income.
- The trade surplus, exports minus imports, is larger the lower is output.
- Higher export demand raises the trade surplus, a higher marginal propensity to import reduces it.

Summary