A Note on Free Trade Equilibrium

Free trade is the situation **where:**

The governments of participating countries do not impose any restriction on free flow of goods and services across the border.

Let there are two countries and two goods as follows:

- **A Home country** and a **foreign country**.
- **Cloth and Food**

Also, Home has **comparative advantage** in **Clothing** and exports the same.

Similarly Foreign is the exporter of food.

Let us now examine a general equilibrium framework

A General Equilibrium Framework

In a general equilibrium framework, equilibrium in one market implies equilibrium in the other market also.

So let us consider just the global market of Food.

- World Demand and Supply

Fig 1 (next slide) shows the **world demand curve** and the **world supply curve (of food).**

Supply of food depend on relative price of food – P_F/P_C.

As P_F/P_C increases, resources are shifted to food sector from clothing sector in both of the countries

So, the supply of food increases in the global market.

Demand curve for food is assumed to be a standard downward sloping one. (P_F/P_C)* **is the equilibrium relative food price.**

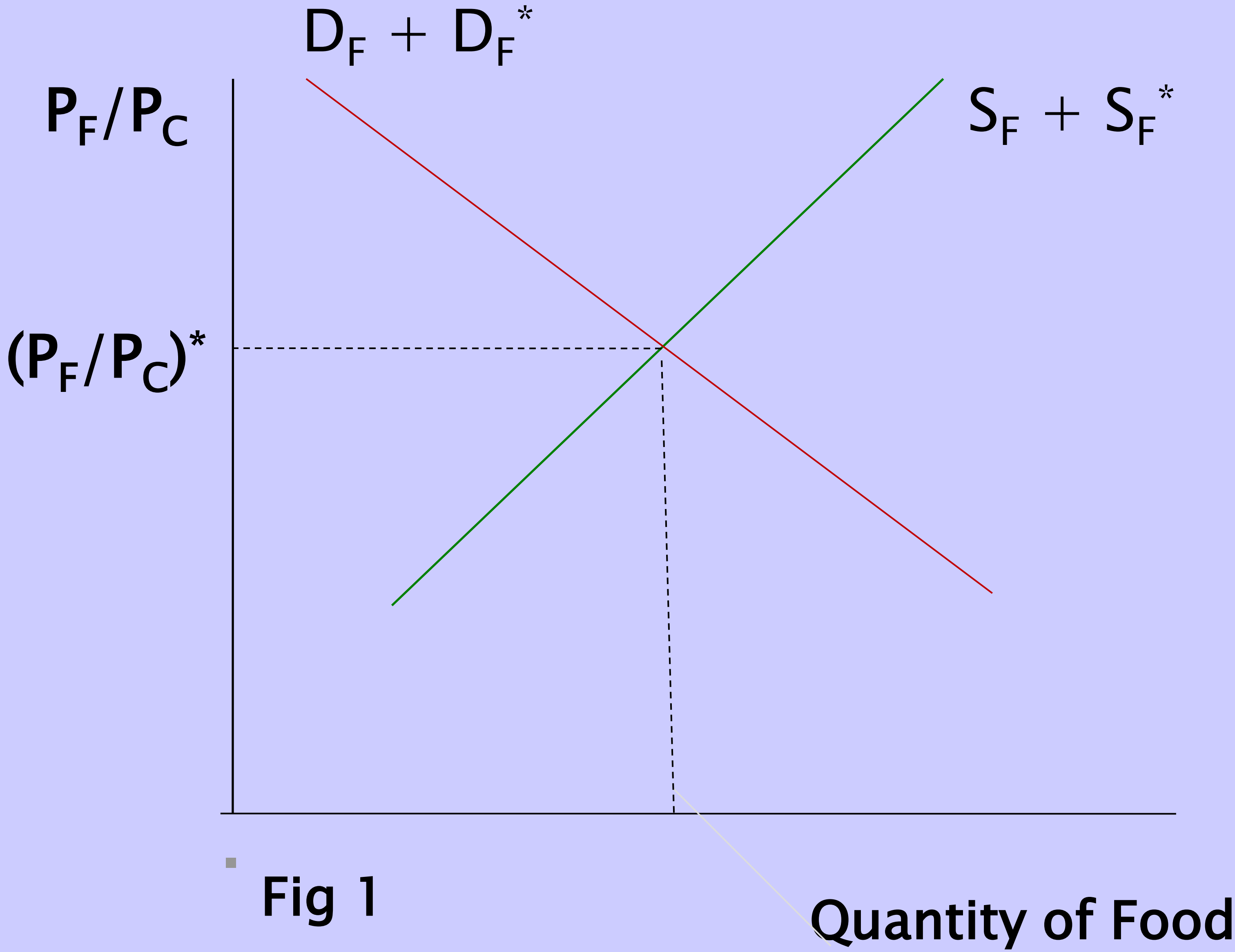
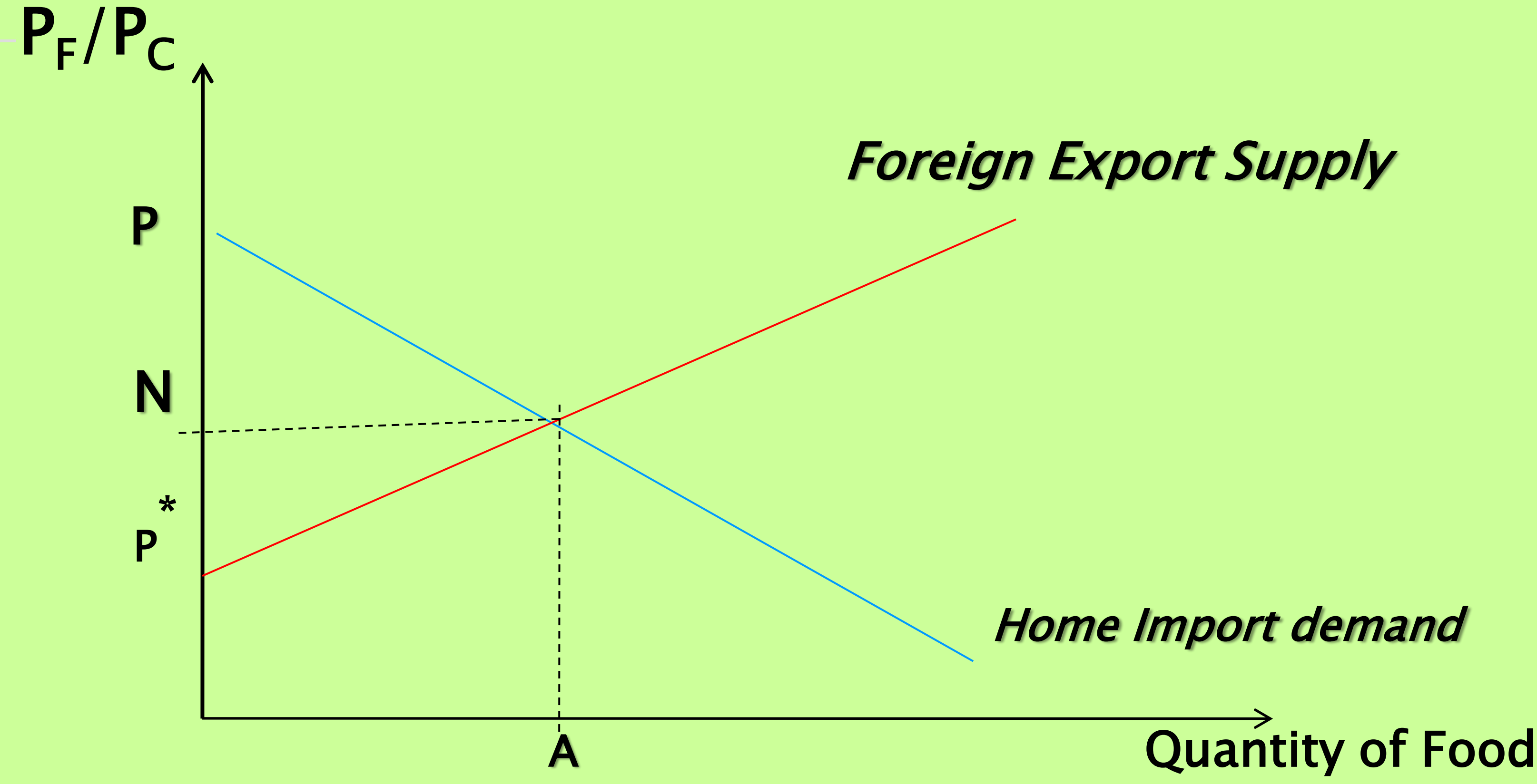


Fig 1

Approach 2: Supply of Export and Demand for Import (Fig 2 below)

A second way of showing free-trade equilibrium:

- *consider net response of consumers and producers at home* , and
- *compare it with the net reaction abroad*



Explanation of Fig 2

- In fig 2, OP is the autarky equilibrium price at home (**Why?**)
- Similarly, OP* is the autarky equilibrium price in the foreign country (**Why?).**

So, if relative price falls below OP:

Home food production < home food consumption ⟹

Home emerges as the importer of food.

Similarly, when relative price exceeds OP*:

Foreign food production > Foreign food consumption ⟹

Foreign emerges as the exporter of food.

Therefore, International equilibrium is established at ON when home import demand exactly matches with foreign export supply.

Approach 3: Offer Curve Analysis (considering two markets simultaneously) (Reference: CHACHOLIADES)

An offer curve in a two good model shows:

the quantity of one good a country wishes to export (or 'offer') in exchange of the commodity it imports. In other words,

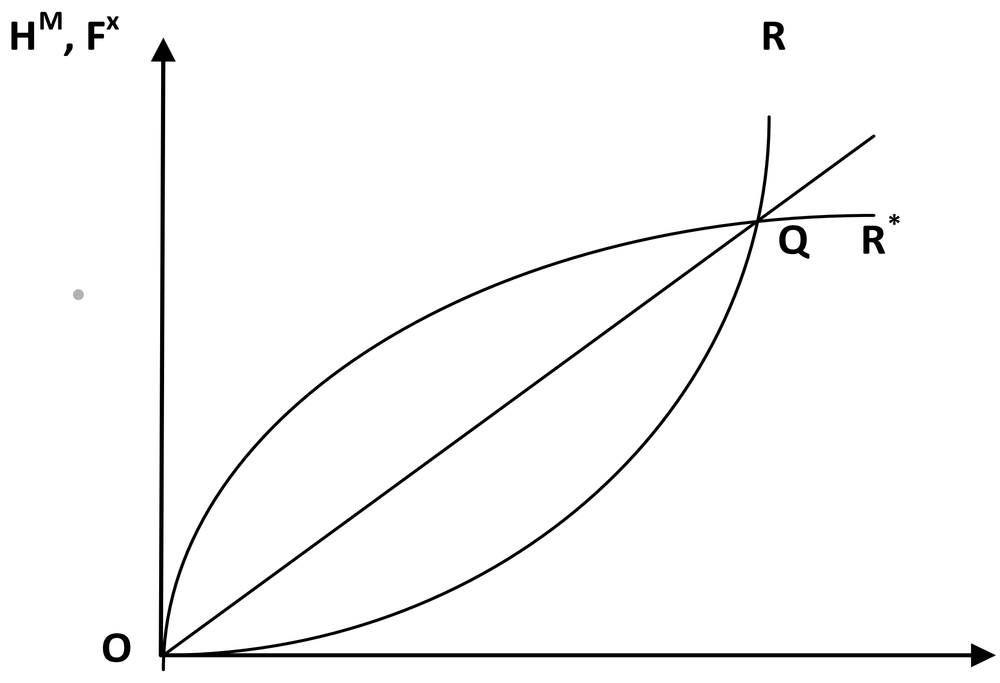
It is the locus of various combinations of exports and imports at each level of TOT

In fig 3 (next slide), the offer curves of home and foreign presented by the curves OR and OR* respectively.

The slope of the line OQ is the equilibrium price ratio P_C / P_F.

FIGURE 3 (OFFER CURVE APPROACH)

Home import & Foreign Export of Food



Home export & Foreign import of Cloth (H^x, F^M)

Stability of Equilibrium

- Analysis on stability of equilibrium can be studied by using offer curve diagram **[Ref: Chacholiades]**
- **We will have a single stable equilibrium when:**

At least one offer curve is upward sloping.

The Marshall – Lerner condition of stability

(e+e*<-1) [*where, e and e* are elasticities of import demand for home and foreign respectively*] **is satisfied in this case.**

In fig 3 both offer curves are upward sloping and the equilibrium is stable, that is:

Deviation from the equilibrium will generate forces to restore the equilibrium at Q again.