

# Section Chapter 7: Trade and Industrialization Strategies

## 1 Trade

- Tradable good (T): Good whose price is determined by the border price and by trade and exchange rate policies.
- Non-tradable good (NT): good whose price is determined by equality between supply and demand on the domestic market.

The domestic price of a tradable good is determined by

$$p^d = \overbrace{ep^s}^{p^b} (1 + t),$$

where  $t = t_M$  =import tariff rate,  $t = -t_E$  = export tax rate,  $t = s$  =domestic producer subsidy (+) or tax (-) rate.

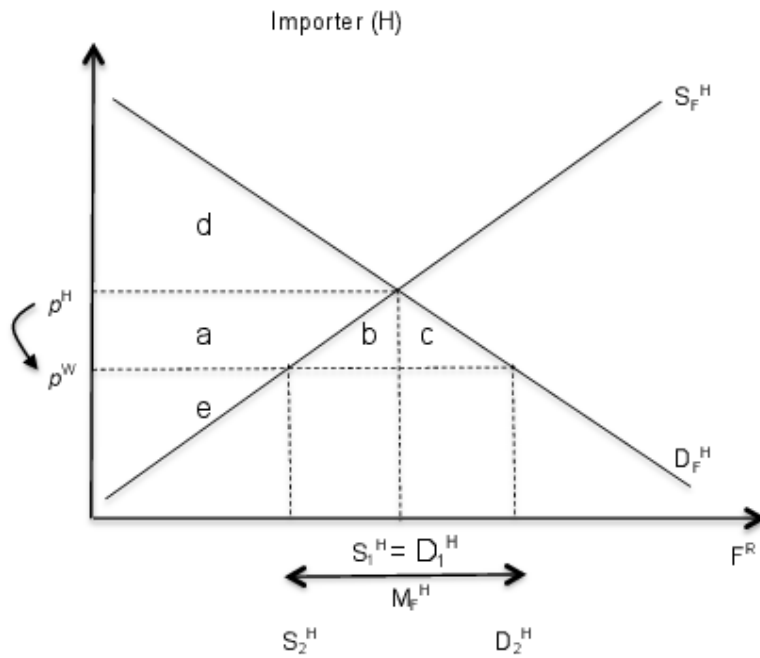
### Gains from trade and protective policies: example with tariffs

Recall from lecture how we think of gains (Net Social Gains [NSG] or surplus) when a country opens itself to trade. For the case of the home country H that is relatively more efficient at manufacturing than food production, the relative world price of food  $P_F^W$  is below the autarkic price of food  $P_F^H$ , and we can think of the figure<sup>1</sup> below. By opening to trade, the price of food falls from  $P_F^H$ , with *consumer surplus*  $d$  and *producer surplus*  $a+e$ , to  $P_F^W$ , with consumer surplus  $a+b+c+d$  and producer surplus  $e$ . Thus, the home country has a positive net social gains from opening to imports

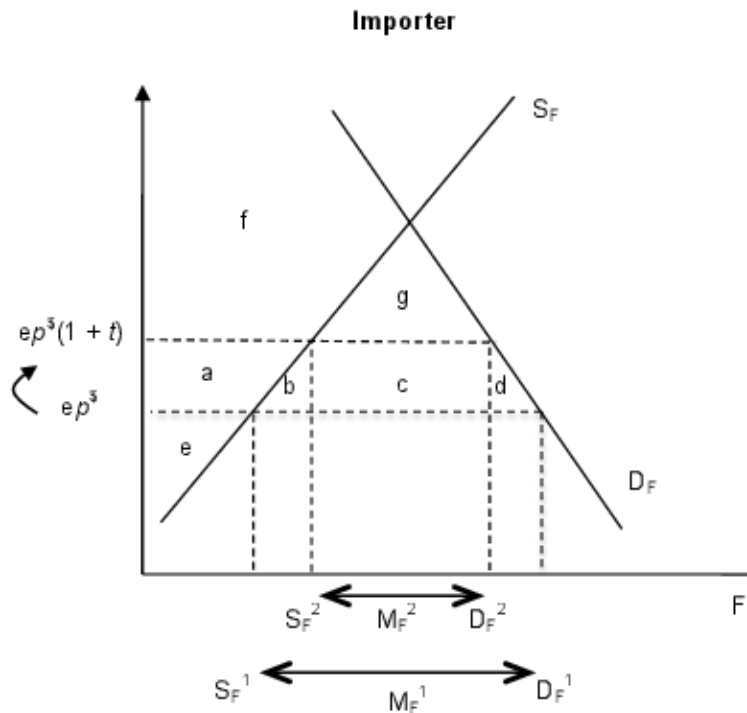
$$NSG = \Delta CS + \Delta PS = (a + b + c) + (-a) = b + c.$$

---

<sup>1</sup>This comes from Figure 5 in Chapter 7.



We can see that for food, consumers are the winners and producers are the losers in this scenario. If the government of the importing country H decides that it would like to offer some protection to producers in the food sector, it may consider imposing a tariff  $t$  (or *ad valorem* tax) on imported food. Now we move to Figure 7 from Chapter 7, where we see that the world price in LCU that the country faces at the border is  $eP^{\$}$ , where  $e$  is the exchange rate and  $P^{\$}$  is the world price in dollars. Without any protective measures, the domestic price is  $P^d = eP^{\$}$ , domestic demand and supply are  $D_F^1$  and  $S_F^1$ , respectively, imports are  $IM_F^1$ , and  $NSG = b + c + d$ .



Once tariff  $t$  is imposed, the domestic price becomes  $P^d = eP^s(1 + t)$ , domestic demand and supply are  $D_F^2$  and  $S_F^2$ , respectively, and imports fall to  $IM_F^2$ , but the government keeps  $c = t * IM_F^2$ , as revenue. As we can see from Table 4 from the chapter, the government gains  $c$  and the producers gain  $a$  compared to an unprotected case, but these gains come at the expense of consumers and society as a whole, with a net social gain of  $-(b + d)$ .

	<b>Exporter</b>			
	Consumer surplus	Producer surplus	Government budget	Net social gain
Free trade				
Import tariff				
Net effect				
Sign of effect				

## 2 Industrialization Strategies

The expansion of the industrial and manufacturing sectors is traditionally seen as an integral step in development, in that these sectors have more potential for technologically driven growth, and have more **linkages** for inspiring change in other areas of the economy compared to low-skilled resource extraction and agriculture (although agriculture is now also cited as having potential for technologically driven growth and linkages: “Agriculture Demand-Led Industrialization”). But, because of inexperience and economies of scale, manufacturing firms in developing countries have higher average costs than those in developed countries. Development economists and policy makers have debated whether and how governments can intervene to promote industrialization.

1. **Import Substituting Industrialization (ISI):** Protect sectors of industry until they (hopefully) become internationally competitive. Ideally, countries would like to “**Import-substitute, then export**” (ISTE).
2. **Export Oriented Industrialization (EOI):** (Temporarily) subsidize firms that have potential to achieve competitiveness.
3. **Open Economy Industrialization (OEI):** Attract **foreign direct investment (FDI)** with a good investment climate

### Import Substitution and Competitive Advantage

ISI strategies tend to emphasize increasing the comparative advantage of a sector of the economy. In the left-hand panel, the shape of the PPF shows that the country has comparative advantage in Agriculture. Before ISI, the representative agent consumes C. Under the ISI policy, domestic prices shift, moving the efficient production point towards industry, but decreasing the utility of the new optimal consumption bundle from C to E. Proponents of ISI argue that technological change and linkages create enough externalities that the fact that the economy is producing at point B where it

has an active industrial sector will mean that its PPF will expand as seen in the right-hand size panel, eventually allowing a consumption bundle of  $C'$ .

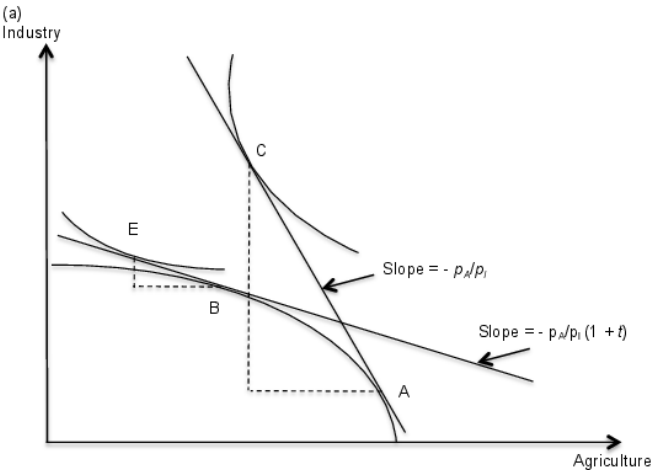


Figure 7.11 Import substitution industrialization strategy as a gamble  
 Panel (a)  
 A Initial production  
 C Initial consumption  
 B Production with tariff  
 E Consumption with tariff

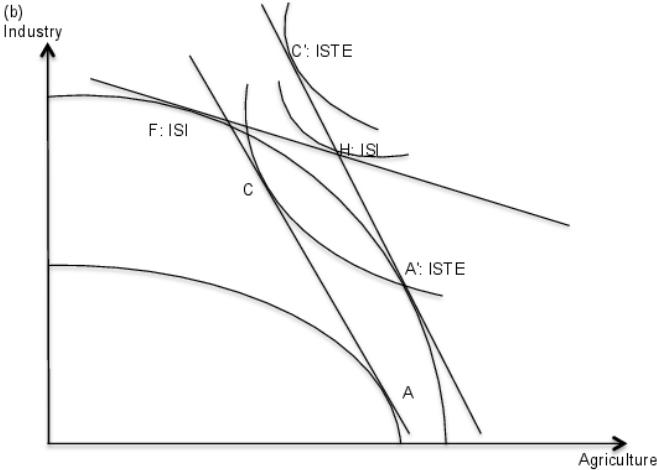


Figure 7.11 Import substitution industrialization strategy as a gamble  
 Panel (b)  
 F Production with ISI  
 H Consumption with ISI  
 A' Production with ISTE  
 C' Consumption with ISTE