# **IB Diploma: Economics**

# Section 3: International Economics COURSE COMPANION

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### Free Trade

### The Benefits of Trade

### What is international trade?

- International trade is the exchange of products (goods and services)
- Trade doesn't take place between countries, it takes place between the economic agents of that country, such as businesses or state governments or consumers
- When conditions are right, external trade brings benefits to all countries involved and it can be a powerful driver for sustained GDP growth and rising average living standards / improved economic welfare

One way of expressing the gains from trade in goods and services is to distinguish between:

- Static gains (i.e. improvements in allocative and productive efficiency in markets)
- **Dynamic gains** (i.e. the gains in welfare from improved product quality, increased choice and faster and more innovative behaviour).

### What is Free Trade?

This is international trade free from artificial barriers such as import tariffs, quotas and other trade barriers. Trade reflects the impact of specialisation and exchange

- **Specialization:** specialisation of scarce resources
- Exchange: based on comparative advantage in supplying different goods and services

David Ricardo proposed a theory of comparative advantage as a key economic argument for international trade.

### What are the Dynamic Gains from Free Trade?

- Trade makes countries better off by allowing them to specialise according to their comparative advantage, providing access to new and cheaper imported goods, and increasing competition between producers
- Dynamic gains from trade make a domestic economy more productive. Examples of potential gains from trade liberalization that fall into this category are:
- Diffusion of knowledge and technology
- Economies of scale in the long run
- Increased competition and innovation
- A within-country selection of more productive firms
- Access to cheaper and more productive inputs into a country's supply-chain
- Less rent-seeking behaviour by monopoly businesses and reduced incentives for corruption which then aids development

### Summary of the key gains from trade



Export revenues and jobs help to reduce the scale of extreme poverty



Increased market contestability reduces prices for consumers



productivity

ROLES PORTE

Inflows of knowledge across borders raises human capital

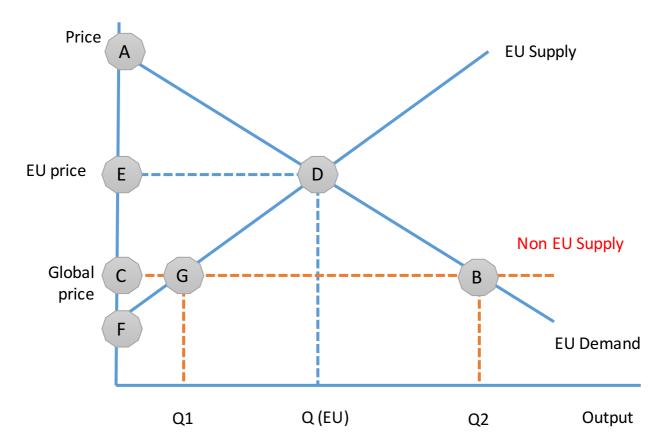


Exploiting economies of scale – causing lower unit costs and prices



Better use of scarce resources from trade in sustainable technologies

# **Supply and Demand Analysis to Illustrate some of the Gains from Free Trade** In the analysis diagram:



The EU price is the price if the only coal available is coal supplied from EU coal producers

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- We assume non-EU countries can export coal into the EU at a lower world price. This
  causes demand to expand and EU domestic supply to contract
- Consumer surplus before trade = area AED
- Consumer surplus after trade = area ACB
- Therefore, there is a net gain in consumer welfare
- Producer surplus before trade = area EFD
- Producer surplus after trade = area CFG
- Therefore, there is a net loss of producer surplus

### Why is Trade important for Developing Countries?

Successful trade provides for developing nations:

- 1. A source of foreign currency to help a nation's balance of payments (trade surplus countries build up US\$ reserves)
- 2. An important way of financing imports of essential imports of capital equipment / technologies and energy supplies
- 3. An injection of demand into the circular flow, creating positive export multiplier effects
- 4. Increased employment in export industries and rising per capita incomes/strong HDI scores
- 5. Falling prices for consumers helps to increase real incomes e.g. by opening up monopoly suppliers of energy to new competition

### **Risks of Trade & Investment for Developing Countries**

Overseas trade and investment also carries risks:

- 1. Volatile global prices affecting export revenues and tax revenues for governments
- 2. Risks that exports will be affected by geo-political uncertainties and cyclical volatility
- 3. Capital flows into developing nations are highly volatile
- 4. Opening up to trade and investment may actually cause rising structural unemployment in some industries as the pattern of demand, output and jobs changes poorer countries may opt for rapid industrialisation aided by import protectionism before they open up
- 5. Countries that specialise in natural resources may suffer from the "natural resource trap"

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Transport costs e.g. question of emissions from food miles



Negative externalities from production and consumption



Risk of structural unemployment as patterns of trade change



Rising inequality – uneven gains from trade



Pressure on wages and working conditions



Risks from global (external) external shocks

### Absolute and Comparative Advantage

### Absolute advantage:

- Occurs when a county can produce a product using fewer resources than another nation
- If a country using the same factors of production can produce more a product, then it has an absolute advantage

### • Comparative advantage:

- Focuses on when a country has lower relative opportunity cost when it decides to specialise in a particular product
- Opportunity cost is the sacrifice of alternative products made when you specialise in another

### Absolute Advantage - An Example

Output with both workers having 10 hours of time available			
	Bricks Laid	Cakes Baked	
Hilary	80	20	
Donald	40	50	
Total	120	70	

In this example, assuming both people have the same factor resource (time) available:

- Hilary can lay more bricks than Donald (8- to 40)
- Donald can bake more cakes than Hilary (50 to 20)
- Hilary has the absolute advantage in brick-laying
- Donald has the absolute advantage in baking cakes
- If they both both specialise fully then total output can increase

### **Absolute Advantage – Gains from Specialisation**

Output with both workers having 10 hours of time available		
	Bricks Laid	Cakes Baked
Hilary	160	0
Donald	0	100
Total	(160) Gain of 40	(100) Gain of 30

### In this example:

- Assuming constant returns
- Hilary specializes in laying bricks
- Donald specializes in baking cakes
- Total output of both increases

### What is the basic model of comparative advantage?

David Ricardo, one of the founding fathers of classical economics developed the idea of comparative advantage

- Comparative advantage exists when
- Relative opportunity cost of production for a product is lower than in another country
- A country is relatively more productively efficient than another
- Basic rule specialise in the goods and services that you are relatively best at
- This opens up important potential gains from specialisation and trade leading to a more efficient allocation of scarce resources

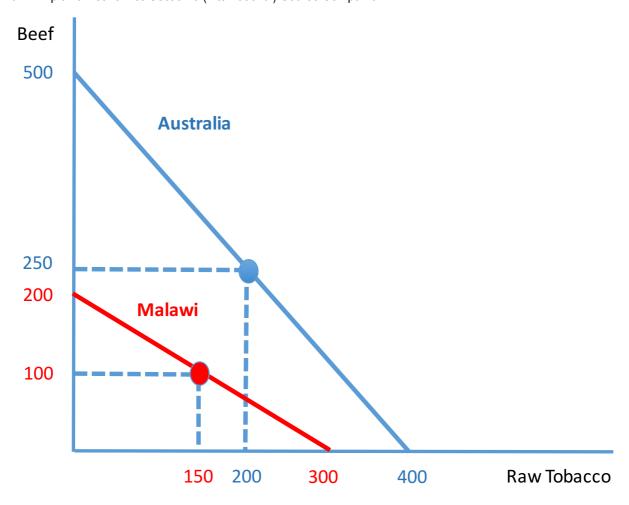
Examples of countries that heavily specialise in key industries:

- Zambia and Chile copper mining
- Bangladesh textiles
- Vietnam light manufacturing (assembly)
- Angola crude oil
- Ivory Coast cocoa

Worked example of comparative advantage, specialisation and potential gains from trade Consider a two-country, two-product numerical example.

Output with ½ resources allocated to each industry in both countries		
	Beef	Tobacco
Australia	250	200
Malawi	100	150
Total	350	350

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### The importance of the opportunity cost ratio

Output with ½ resources allocated to each industry in both countries			
	Beef	Tobacco	Opportunity Cost Ratio
Australia	250	200	5:4
Malawi	100	150	10:15
Total	350	350	

### Working out the comparative advantage:

- Australia has a comparative advantage in producing Beef (the opportunity cost of an extra unit of beef is 4/5th unit of tobacco, whereas for Malawi it is 1.5 units of tobacco
- Malawi has a comparative advantage in producing tobacco the opportunity cost of an extra unit of tobacco is 2/3rd of beef whereas for Australia it is 5/4

### **Gains from specialisation**

If both countries specialise according to comparative advantage, and assuming constant returns to scale, then total output can rise.

Output after specialisation has taken place			
	Beef	Tobacco	
Australia	400 (+150)	80 (-120)	
Malawi	0 (-100)	300 (+150)	
Total	400 (+50)	380 (+30)	