

International Trade





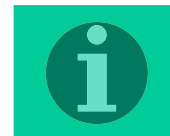
Colonial Britain in Industrial Revolution

- A key factor of Great Britain's success was through importing raw materials from the wider colonies.
- Without these, our industries would not have been able to grow and dominate the world stage



David Ricardo

- Perhaps his most important contribution was the theory of comparative advantage, a fundamental argument in favour of free trade among countries and of specialisation among individuals.
- Ricardo argued that there is mutual benefit from trade (or exchange) even if one party (e.g. resource-rich country, highly-skilled artisan) is more productive in every possible area than its trading counterpart (e.g. resource-poor country, unskilled laborer), as long as each concentrates on the activities where it has a *relative* productivity advantage



Specialisation





Consider Iceland



Iceland as a 'closed economy....?'

- If Iceland was a closed economy that did not trade with the rest of the world...
- How narrow would it's goods & service provision be due to its natural resource base?
- With a small population, and no exports or imports - how 'efficient' would their economy be?





Iceland as an open economy...

- In an open economy, with international trade Iceland can import raw materials and energy
- It allows Iceland's PPF to grow
- Iceland can now produce a greater range of goods and services.
- By gaining access to a larger market - Iceland benefits from economies of scale and larger production runs.
- Icelandic household's benefit from a greater choice, higher living standards and economic welfare with international trade than it ever could generate without it.

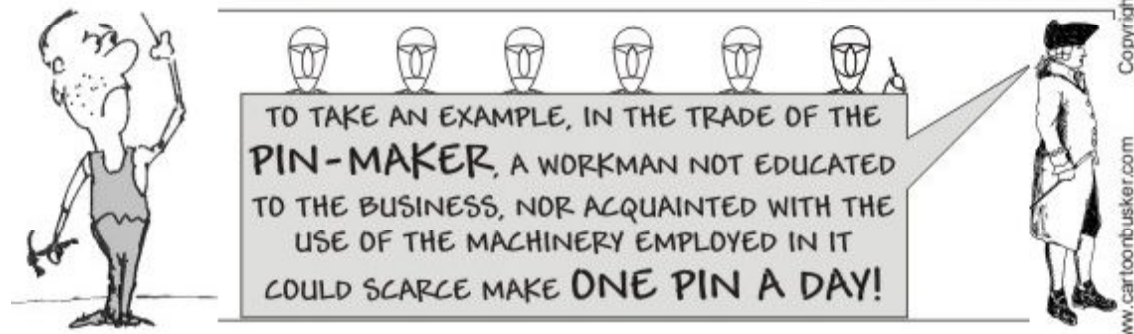
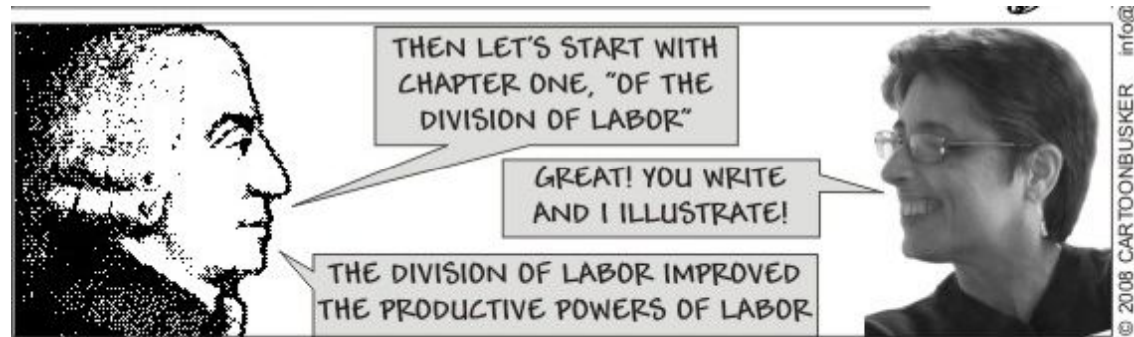
Key theory



Specialisation & Division of Labour

- What is Adam Smith's Wealth of Nations....
- & the theory of Specialisation & Division of Labour?

- Pin factory?



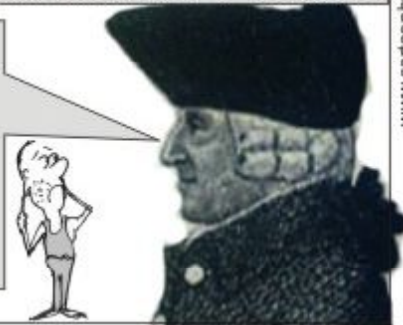


CHAPTER II

WHAT IS THE ORIGIN OF THE DIVISION OF LABOR? MAN CAN'T BE THAT WISE TO FORESEE THE GENERAL OPULENCE IT CAUSES.



THE DIVISION OF LABOR IS THE CONSEQUENCE OF A HUMAN PROPENSITY TO TRUCK, BARTER AND EXCHANGE ONE THING FOR ANOTHER.



Anybody wants to exchange one pin?



THIS IS BECAUSE MAN HAS ALMOST CONSTANT NEED FOR THE HELP OF ITS BRETHREN.

AND IT IS IN VAIN FOR HIM TO EXPECT IT FROM THEIR BENEVOLENCE ONLY.

SO HE OFFERS A BARGAIN OF ANY KIND.

I am vegetarian!

Good. Share your carrots with him, then! You've got company for dinner!



More cartoons here



Specialisation

- Three main reasons why specialisation increases total output:
 - Workers don't switch between tasks, so time is saved
 - More & better machinery is employed, **capital widening**
 - Practice makes workers more efficient & productive

A collage of international flags including the United Kingdom, Canada, and the United States, with fountain pens overlaid on them. The flags are arranged in a layered, overlapping fashion. The text is positioned in the upper right quadrant of the image.

So how does this link to

International trade?

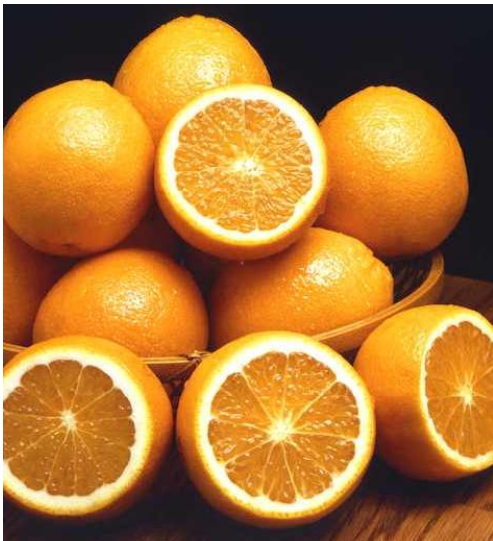


Absolute Advantage

- **Absolute Advantage** is where one country is better at producing a product rather than another country.
- **It can make more**, i.e. it has greater productivity.
- Absolute Advantage is the ability to produce more using fewer resources than any other country / region.

Another Definition...

- A country has an **absolute advantage** over its trading partners if it is able to produce more of a good or service with the same amount of resources, or the same amount of a good or service with fewer resources.



Florida's oranges

Zambi's absolute
advantage with
copper
production



Question...

	UK			France	
	Cars			Cars	Computers

The UK and France have identical resources. Using all of these resources they can produce either cars or computers, or some combination of the two as shown above.

TASK: Assuming constant returns to scale, state which country has an **ABSOLUTE ADVANTAGE** in the production of cars and computers in each of the above situations.

Question...

	UK		
	Cars		Computers
A	10	OR	100

	France		
	Cars		Computers
	9	OR	108

Absolute advantage
with cars

Absolute advantage
with computers

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Question...

	UK		
	Cars		Computers
A	10	OR	100
B	5	OR	10

	France		
	Cars		Computers
	9	OR	108
	4	OR	12

Absolute advantage
with cars

Absolute advantage
with computers

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Question...

	UK		
	Cars		Computers
A	10	OR	100
B	5	OR	10
C	20	OR	80

	France		
	Cars		Computers
A	9	OR	108
B	4	OR	12
C	15	OR	75

Absolute advantage
with computers

Absolute advantage
with cars

The UK and France have identical resources. Using all of these resources they can produce either cars or computers, or some combination of the two as shown above.

TASK: Assuming constant returns to scale, state which country has an ABSOLUTE ADVANTAGE in the production of cars and computers in each of the above situations.

Question...

	UK		
	Cars		Computers
A	10	OR	100
B	5	OR	10
C	20	OR	80
D	5	OR	25

	France		
	Cars		Computers
	9	OR	108
	4	OR	12
	25	OR	75
	4	OR	30

Absolute advantage
with cars

Absolute advantage
with computers

TASK: Assuming constant returns to scale, state which country has an ABSOLUTE ADVANTAGE in the production of cars and computers in each of the above situations.

Question...

	UK				France		
	Cars		Computers		Cars		Computers
A	10	OR	100		9	OR	108
B	5	OR	10		4	OR	12
C	20	OR	80		25	OR	75
D	5	OR	25		4	OR	30
E	6	OR	18		8	OR	20

The UK and France have identical resources. Using all of these resources they can produce either of the two goods or any combination of the two as shown below.

TASK: Assuming constant returns to scale, identify the country with ABSOLUTE ADVANTAGE in the production of each of the above situations.

Absolute advantage
with cars

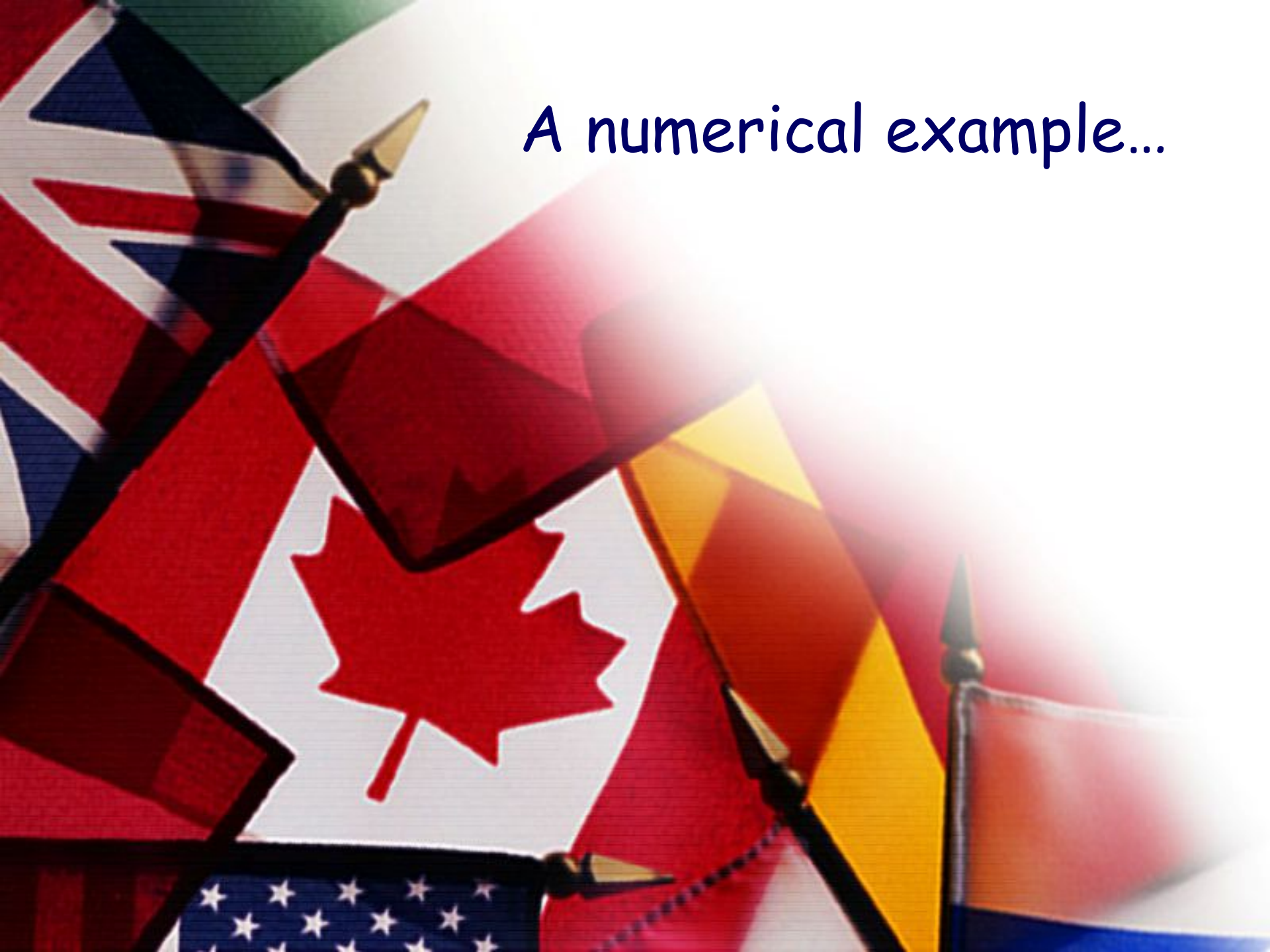
Absolute advantage
with computers



Absolute advantage

- How would you define absolute advantage?
- Its where a country is 'best at' producing a good or service...
- The country is more technically capable...
- Productive efficiency
- Allocative efficient

A numerical example...





Consider this...

- Two countries: country A & country B which have 2 units of 'resources' (labour)
- They only have resources to make only guns & butter!
- Resources can be switched between both industries.
- If they used just 1 unit of resources they can make either...
- Country A 4 guns or 2 tonnes of butter
- Country B 1 gun or 6 tonnes of butter

Consider this...

- With only one unit of resource...

Who has absolute advantage in guns?

Who has absolute advantage in butter?

- Country A

4 guns

or

2 tonnes of butter

- Country B

1 gun

or

6 tonnes of butter



- With only one unit of resource...
- Country A
- 4 guns or 2 tonnes of butter
- Country B
- 1 gun or 6 tonnes of butter
- What if the two countries divided their total resources equally between both industries and used **TWO** units of resource...
- How much can each country now make?



- With only one unit of resource...
- Country A
- 4 guns or 2 tonnes of butter
- Country B
- 1 gun or 6 tonnes of butter
- What if the two countries divided their total resources equally between both industries and used **TWO** units of resource...
- How much can each country now make?
- Country A
- ● guns and ● tonnes of butter
- Country B
- ● gun and ● tonnes of butter



Consider this...

- So with using all their resources this is the total production for each country...

What is the total amount of guns & butter being produced ?

- Country A 4 guns and 2 tonnes of butter
 - Country B 1 gun and 6 tonnes of butter
- Total amount = 5 guns and 8 tonnes of butter**



So what if they 'traded?

Each country specialises in what
they are good at....

Absolute advantage...



Specialisation

- So with using all their resources in their specialist area...
- Country A with TWO resources can now produce
- $2 \times 4 \text{ guns} = 8 \text{ guns}$
- Country B with TWO resources can now produce
- $2 \times 6 \text{ butter} = 12 \text{ tonnes of butter}$

There is now a
NET GAIN due
to specialisation



Specialisation

- So with using all their resources in their specialist area....
- Country A with TWO resources can now produce
- $2 \times 4 \text{ guns} = 8 \text{ guns}$
- Country B with TWO resources can now produce
- $2 \times 6 \text{ butter} = 12 \text{ tonnes of butter}$

- Without specialisation, outputs are 5 guns and 8 tonnes of butter.
- With specialisation, outputs are 8 guns and 12 tonnes of butter.



Criticisms so far

- If both countries now wanted to trade with each other...
 - There are still the admin and transport costs to consider.
 - Both countries need to trade with each other (what if country B is a pacifist country & don't want guns Or if country A is vegan & doesn't want butter!
 - They need to have a 'surplus' of in order to trade
 - There are no external shocks to either country that affects their resources.... Natural or man made - earthquake, tidal wave, wars...

The next stage



Comparative Advantage





Comparative advantage

- To make this 'easier'... will change the absolute advantages....

- Country B has faced a natural disaster that has effected butter production....

Who has absolute advantage now?

- One unit of resource can now produce either

- Country A 4 guns or 2 tonnes of butter
- Country B 1 gun or 1 tonnes of butter



Comparative advantage

- This is measured in opportunity costs!
- This is what the country gives up when it increases production within one industry
- The country that gives up **the least** of the 'other' commodity when increasing output of a particular good has the **comparative advantage**.



So who has comparative advantage?

- Country A 4 guns or 2 tonnes of butter
- Country B 1 gun or 1 tonnes of butter

- What is the opportunity cost for Country A of producing one more tonne of butter?
- $4/2 = 2$
- So to produce one more tonne it will have to give up 2 guns....

- What is the opportunity cost for Country B of producing one more tonne of butter?
- $1/1 = 1$

- So country B has comparative advantage of producing butter since it has 'less to loose' by switching production...