

The nation and the world economy

ECONOMICS

Dr. Kumar Aniket

Bartlett School of Construction & Project Management

Lecture 18

CONTEXT

Exchange between parties can be mutually beneficial but conflicts arise over how these gains are distributed. (Units 5-9)

When goods/services, people, and financial assets can cross national boundaries, new set of complications arise

- How can governments influence trade?
- What affects the distribution of gains from trade?
- When can globalisation be detrimental to growth?

JOB CHARACTERISTICS

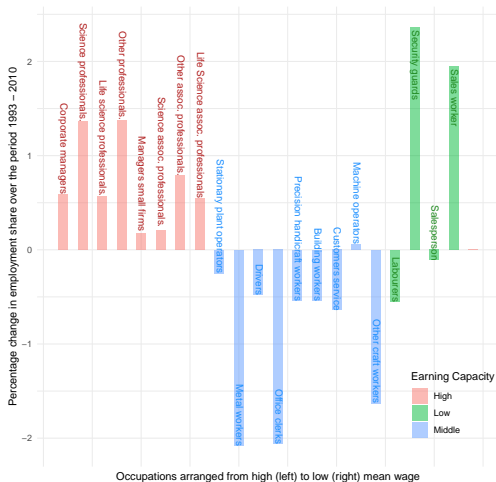
Jobs on the *Routine Task Intensity* and *Offshorability* index



Data source: Goos et al. (2014)

JOB POLARISATION

Percentage change in employment share (1993-2010)



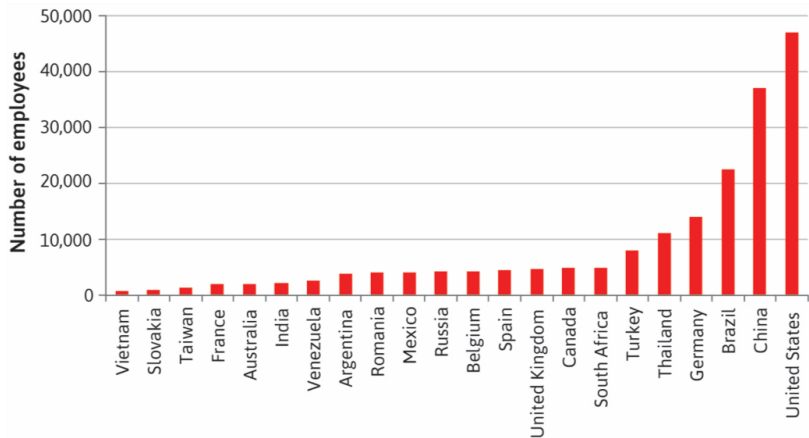
Data source: Goos et. al. (2014)

GLOBALISATION

<i>Globalisation</i>	A process by which the economies of the world become more integrated by the freer flow across national boundaries of goods, investment, and labour.
<i>Trade</i>	flow of goods across borders
<i>Capital flows</i>	flow of investment across borders
<i>Immigration</i>	flow of goods across borders

GLOBALISATION

Ford Employees across the world in 2014: a reflection of opportunities globalisation offers large firms



INTEGRATION OF GOODS MARKETS

Common measures of globalisation:

- Trade (export or import) as a share of GDP
- Reduction in trade costs (price gaps) between countries

Merchandise trade Tangible products that are
physically shipped across
borders

INTEGRATION OF GOODS MARKETS

Trade as a share of GDP: Upward trend in worldwide trade (except 1914-1945), with sharp acceleration from 1990s onwards

World Merchandise Exports as a share of World GDP (1820–2011)



INTEGRATION OF GOODS MARKETS

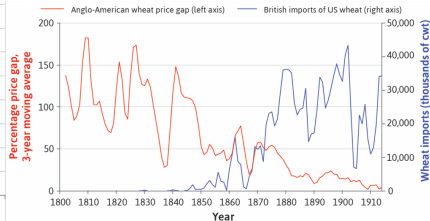
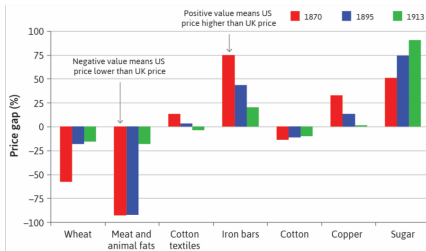
Reduction in trade costs (price gaps) between countries

Law of One Price should hold if there are no transport costs or barriers to trade.

- Price gap* Difference in the price of a good in the exporting and importing country
- Arbitrage* in competitive equilibrium the price gap should equal the sum of all trade costs

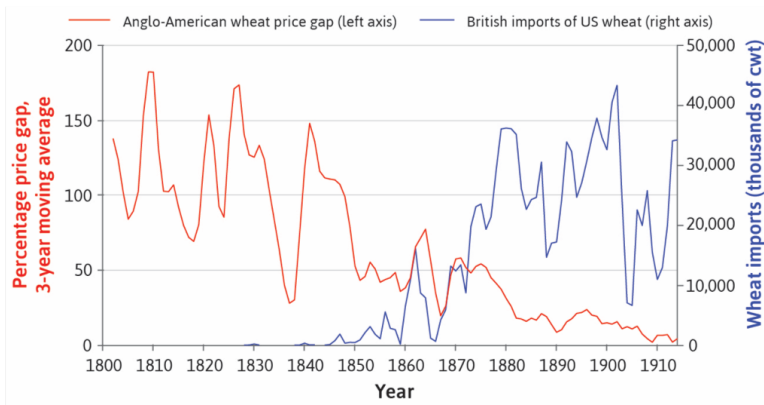
EVIDENCE OF GLOBALISATION OF GOODS

Price gaps between countries have generally declined over time, while the volume of goods traded has generally increased.



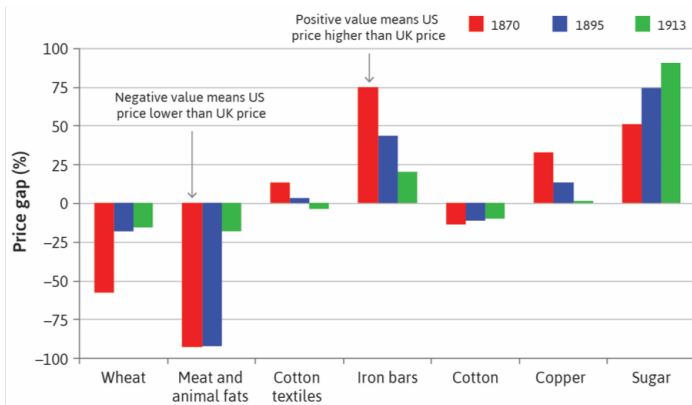
EVIDENCE OF GLOBALISATION OF GOODS

Anglo-American wheat trade (1800-1914): wheat price gap started declining after 1840 and volume of wheat shipped increased as the cost of shipping started falling as a result of introduction of steamships.



EVIDENCE OF GLOBALISATION OF GOODS

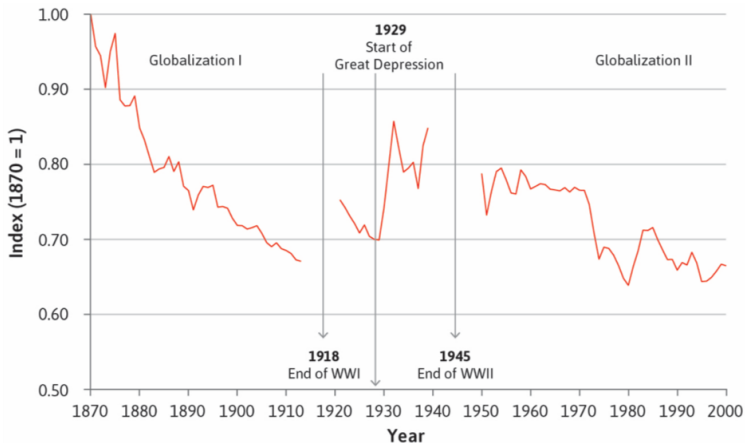
Anglo-American wheat trade (1870-1913): For agricultural commodities, British prices were higher, for industrial commodities, American prices were higher. Nearly all prices fell over this period.



TRENDS IN GLOBALISATION

Globalization I before 1870 until 1914

Globalization II the end of the Second World War until now



TRENDS IN GLOBALISATION

Globalization I before 1870 until 1914

Globalization II the end of the Second World War until now

Deglobalization increasing trade costs during *The Depression*

partly due to protectionist policies aimed at protecting domestic employment (tariffs and quotas on imports).

INTEGRATION OF CAPITAL MARKETS

If a country has an *export surplus* (it exports more than imports), it is left with foreign currency as a result of its export surplus.

- The foreign currency can either *increase the reserves of the central bank* or is *invested abroad*.

Current account (CA) exports – imports + net investment

CA deficit Country is borrowing (receiving net capital flows)

CA surplus Country is lending (net capital outflow)

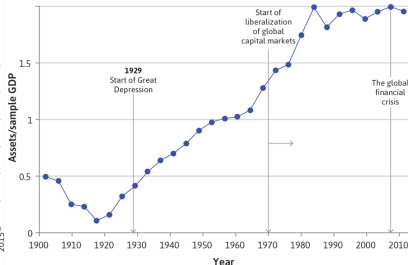
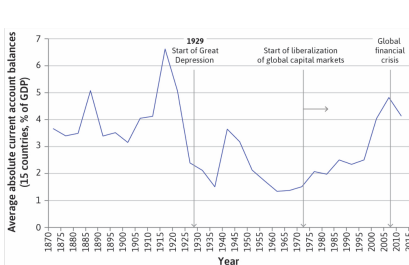
Balance of payments records sources & uses of foreign exchange, which include:

Portfolio investment buying foreign stocks/bonds

Foreign direct investment ownership of foreign physical assets

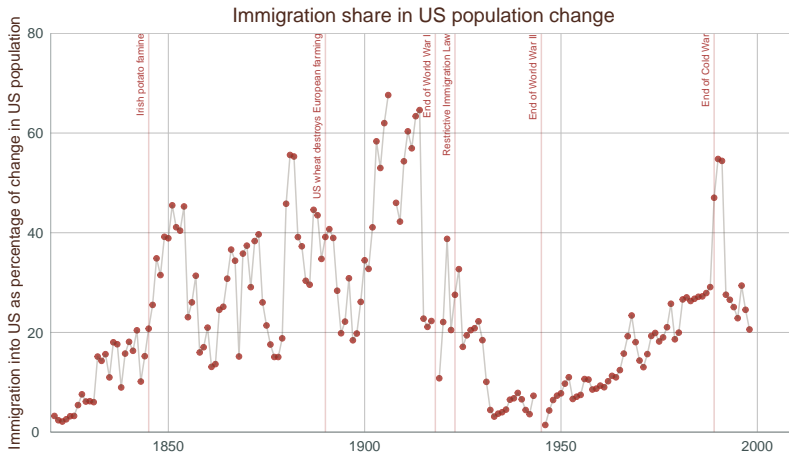
TRENDS IN GLOBALISATION OF CAPITAL MARKETS

- Historically, increased trade resulted in larger *current account* imbalances.
- Countries that trade more also tend to borrow and lend more
- International asset holdings increased over the 20th century



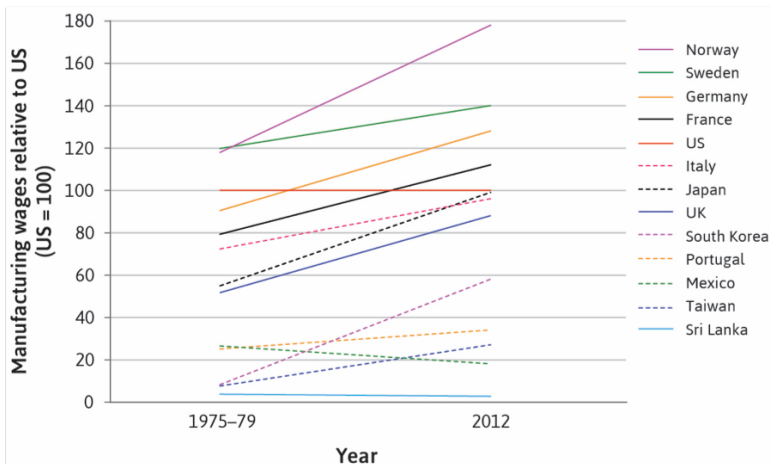
LABOUR MARKETS INTEGRATION

Fewer advances in labour market integration than goods or financial market integration due to immigration barriers.



LABOUR MARKETS INTEGRATION

Wages still differ across countries due to migration costs.



SPECIALISATION

Increased globalisation means that most nations engage in both *specialisation* and *trade*.

Specialisation when an entity produces a narrower range of goods than it consumes, acquiring the rest through trade

Reasons for specialisation include:

- Comparative advantage* in producing particular goods
- Economies of agglomeration* cost reductions from locating close to other firms in similar industries
- Economies of scale* cost advantages from producing more

COMPARATIVE ADVANTAGE

Absolute advantage the producer requires fewer inputs to produce a particular good than any other producer

Comparative advantage the particular good where the producers have greatest absolute advantage

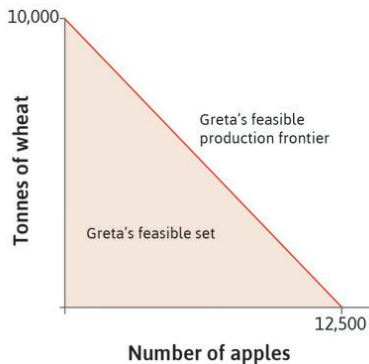
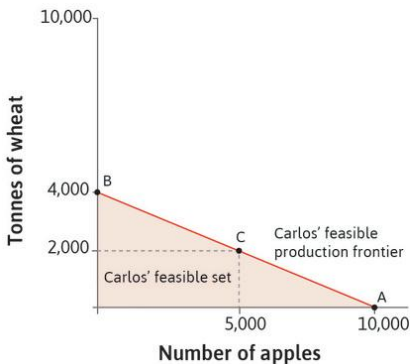
A producers may not have absolute advantage in any good, but she will always have a comparative advantage in some good

Trade can be mutually beneficial when both parties specialise in the good in which they have a comparative advantage.

COMPARATIVE ADVANTAGE

Production if all time is spent on one good, per hectare of land

Greta 1,250 apples or 100 tonnes of wheat
Carlos 1,000 apples or 40 tonnes of wheat



COMPARATIVE ADVANTAGE

An island has a *comparative advantage* in producing a good when it is relatively cheaper in their economy (in the absence of trade).

<i>Island</i>	<i>Apple (Carlos)</i>	<i>Wheat (Greta)</i>
<i>Land (in hectares)</i>	100	100
<i>Production per hectare per year</i>		
<i>Tonnes of wheat produced</i>	400	1,000
<i>Number of apples produced</i>	1,000	1,250
<i>Relative prices</i>		
<i>Relative price of wheat per apple</i>	$\frac{1,000}{400} = 2.5$	$\frac{1,250}{1,000} = 1.25$
<i>Relative price of apples per tonne wheat</i>	$\frac{400}{1,000} = 0.4$	$\frac{1,000}{1,250} = 0.8$

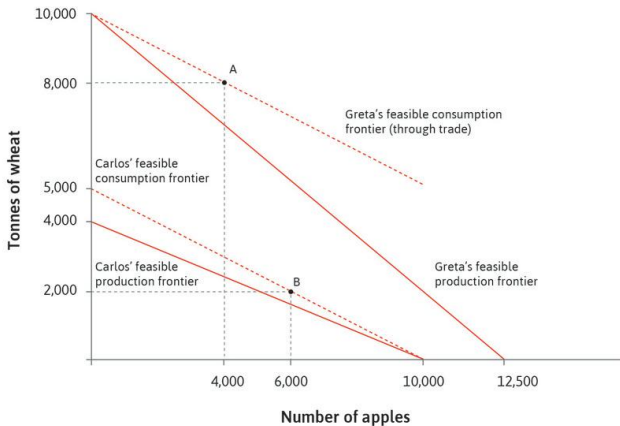
COMPARATIVE ADVANTAGE

<i>Island</i>	<i>Apple (Carlos)</i>	<i>Wheat (Greta)</i>
<hr/>		
<i>Total production</i>		
<i>Total tonnes of wheat produced</i>	0	10,000
<i>Total number of apples produced</i>	10,000	0
<hr/>		
<i>Apples exported</i>	4,000	
<i>Wheat exported</i>		2000
<hr/>		
<i>Apples consumed</i>	6,000	4,000
<i>Wheat consumed</i>	2000	8000
<hr/>		

Apples are comparatively cheaper on apple island and wheat is comparatively cheaper on wheat island. Hence, *Carlos has a comparative advantage in apples* and *Greta has a comparative advantage in wheat*.

COMPARATIVE ADVANTAGE

With trade, *Carlos specialises in producing apples* and *Greta specialises in producing wheat*. Both of their consumption frontiers are above their production frontiers, so they are both better off



CAPITAL AND LABOUR INTENSITY

Capital intensive good requires a lot of capital and relatively less labour to produce, e.g., aircraft

Labour intensive good requires a lot of labour and relatively little capital to produce, e.g., consumer electronics

- The principle of comparative advantage is often used to analyse where capital intensive and labour-intensive goods are produced.

Countries	<i>Capital</i>	<i>Labour</i>	Comparative advantage
Developed	<i>cheap</i>	<i>expensive</i>	Capital-intensive goods
Developing	<i>expensive</i>	<i>cheap</i>	Labour-intensive goods

IMPACT OF TRADE: EXAMPLE

Let's assume there are only 2 goods in the world:

- passenger aircraft (capital-intensive) and
- consumer electronics (labour-intensive).

The US is relatively capital abundant, whereas China is relatively labour abundant

- specialisation according to factor endowments.

If US export capital intensive good to China and China exports labour intensive goods to US

- Returns to capital increase in US
- Wage increases in China

IMPACT OF TRADE

Winners in the US

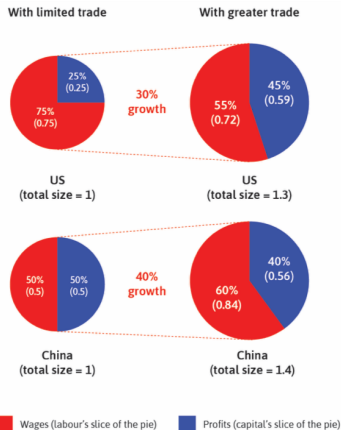
Owners of capital

inequality should *rise*

Winners in China

Workers (higher wages)

inequality should *fall*



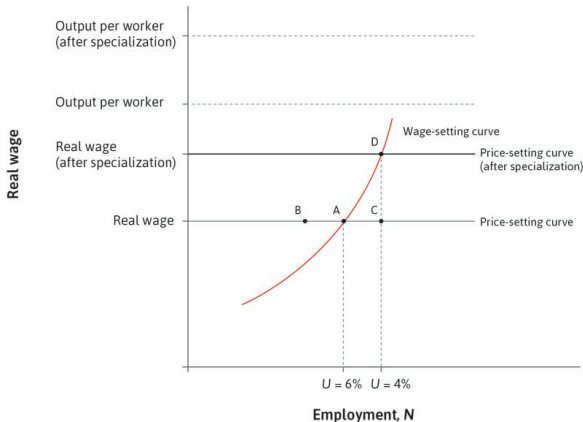
WINNERS AND LOSERS: LONG RUN

Trade leads to specialisation, which leads to increased productivity as the country is producing what it is better at.

- Specialisation shifts the price-setting curve upward:
 - In the short run, jobs are destroyed.
 - In the medium run, growth in export industries creates new jobs.
- Long-run adjustment process depends on how much wage-setting curve shifts as a result of trade.

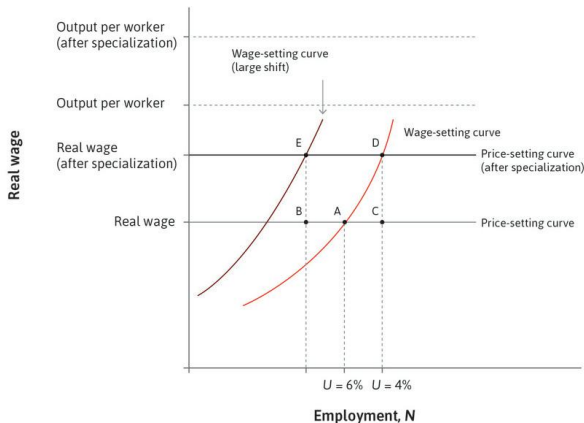
IMPACT OF TRADE

Trade shifts up the price-setting curve. US is producing less consumer electronics now ($A \rightarrow B$) and more aircrafts ($B \rightarrow C$). Increased demand for labour leads to higher wages ($C \rightarrow D$).



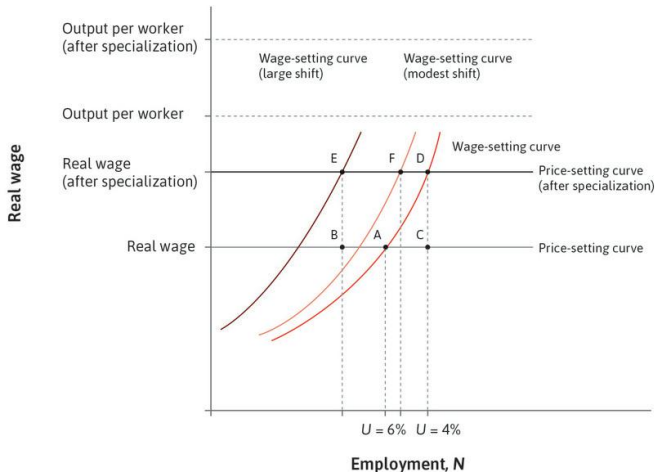
IMPACT OF TRADE

Increased job turnover leads to workers asking for more generous unemployment benefits, leading to wage-setting curve shifting left and leading to higher unemployment ($D \rightarrow E$).



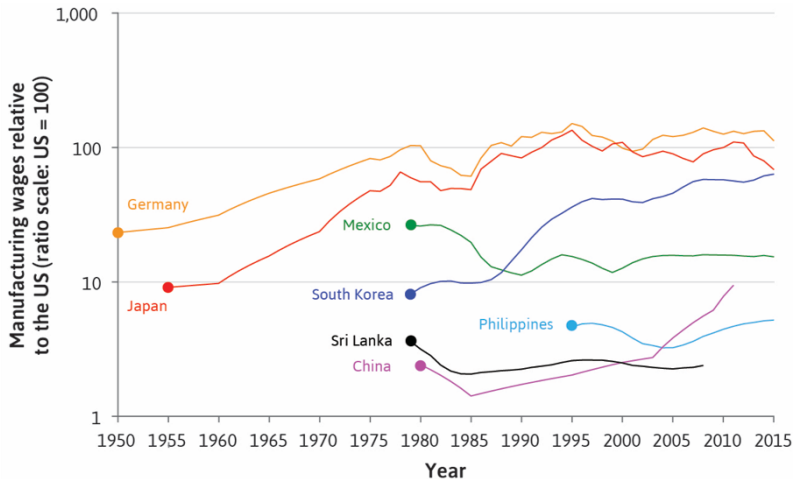
IMPACT OF TRADE

A more modest shift in wage-setting curve would lead to lower unemployment ($D \rightarrow F$).



IMPACT OF TRADE

Manufacturing wages relative to the US (1950-2015)



GLOBALISATION AND ECONOMIC PERFORMANCE

- Some countries have benefitted more from globalisation than others.
- Economic success depends on how well policies have managed growth due to economic integration.
 - During industrialisation, Germany and the US achieved high economic growth despite high manufacturing tariffs.
 - Scandinavian countries prospered through openness, with policies that help displaced workers.

SUMMARY

- Economies have become more integrated over time
 - Specialisation and trade can be mutually beneficial
 - Winners and losers in the short run, both within and between countries, depending on relative factor abundance
 - All parties can benefit in the long-run with good policymaking