EC3355: International Trade
Trade patterns

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Today

- Administrative stuff
- Basic concepts
- Some fact about world trade

General information

Course contents

- Trade patterns (2 lectures)
  - Trade facts
  - Gravity model
- Theoretical models of trade (3 lectures)
  - Comparative advantage: the Ricardian model
  - Factor mobility: the Specific factors model
  - Resources and trade: the Heckscher-Ohlin model
- All things policy (4 lectures)
  - Policy instruments
  - Political economy of trade
  - International trade and the Global South
  - Effect of trade on income, inequality, and the environment
- Review session or Everything you always wanted to know about international trade but were afraid to ask

General information

Course material

- Lecture slides
- Problem sets
- Academic papers
- Miscellaneous items posted on Moodle
  (videos, news articles, etc.)
- International Economics: Theory and Policy,
  Paul Krugman and Maurice Obstfeld, Marc Melitz,
  9th Edition, 2012
  (*Optional*)

General information

Course delivery

- One 2-hour lecture per week (10 lectures in total)
- One 1-hour seminar per week (9 seminars in total)

General information

Course evaluation

- 2-hour unseen exam
  - In Summer term
  - 75% of total grade
  - Based on: problem sets, lecture content
  - Everything from lecture, seminar, additional material is fair game
- Essay
  - Due week 10
  - 25% of total grade
  - 1,200 words
  - Can pick any of the suggested topics
    - Or choose own topic in agreement with me

General Information

Learning outcomes and how to achieve them

- Learning outcomes
  - Have a good understanding of the theoretical models that explain international trade
  - Being able to explain cross-country differences in trade patterns and policies
  - Apply knowledge to real world examples and provide academic analysis on current events
- How to achieve the learning outcomes
  - Attend the lectures regularly and pay attention (lecture slides are no perfect substitute)
  - Solve the problem sets
  - Study the recommended literature
  - Ask questions when things are not clear

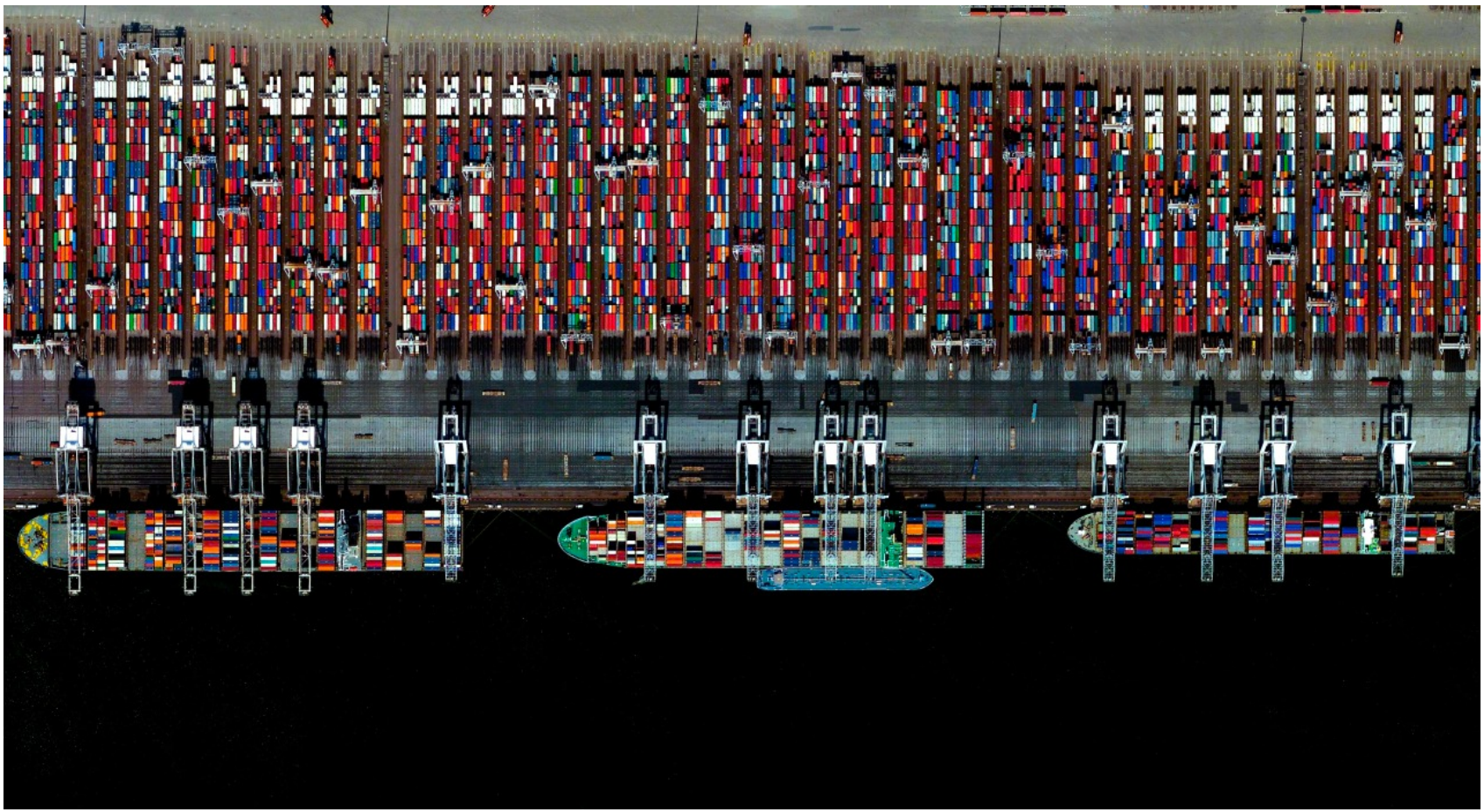
General information

Contact

- Office hours:
  Monday 13:00-14:00
  Tuesday 11:00-12:00
  Arts Building S3
- E-mail:
  pwte054[at]rhul.ac.uk
  Please use course code (EC3355) in e-mail subject

Basic concepts

Quintessential trade picture



Basic concepts

Of interest to this course

- Movement of goods and services from one country to another
  - Merchandise goods: Everything but services, includes agricultural, mining, and manufactured products
  - Services: Includes things like travel, insurance, and transportation
- Movement of factors of production across countries
  - Migration: Flow of people, and thus labour, across borders from one to another country
  - Foreign Direct Investment: The flow of capital across borders when a firm own a company in another country

Gains from trade

Why do countries trade?

- Countries trade goods and services with each other as it generates mutual benefits
  - Norwegians import oranges which they would have a hard time producing
  - Foreign items could be cheaper or better in quality
- Use finite resources to produce what they are most productive at and trade products for goods/services they want to consume
  - Countries can specialise and still consume variety of goods/services through trade

Gains from trade

Why do countries trade?

- Countries can export goods produced with relatively abundant resources and import goods made with relatively scarce resources
- Specialised countries can be more efficient due to large-scale production (economies of scale)
- Countries can also gain from international lending as well as migration

Gains from trade

Losses incurred due to international trade

- Although trade is predicted to benefit the whole country, it may harm particular groups
  - Trade can harm owners of resources that are used relatively intensively in industries that compete with imports
  - Trade can affect income distribution within a country
- Negative effect on local environment

Measuring international trade

Trade balance

- Trade balance: difference between the total value of export and total value of imports

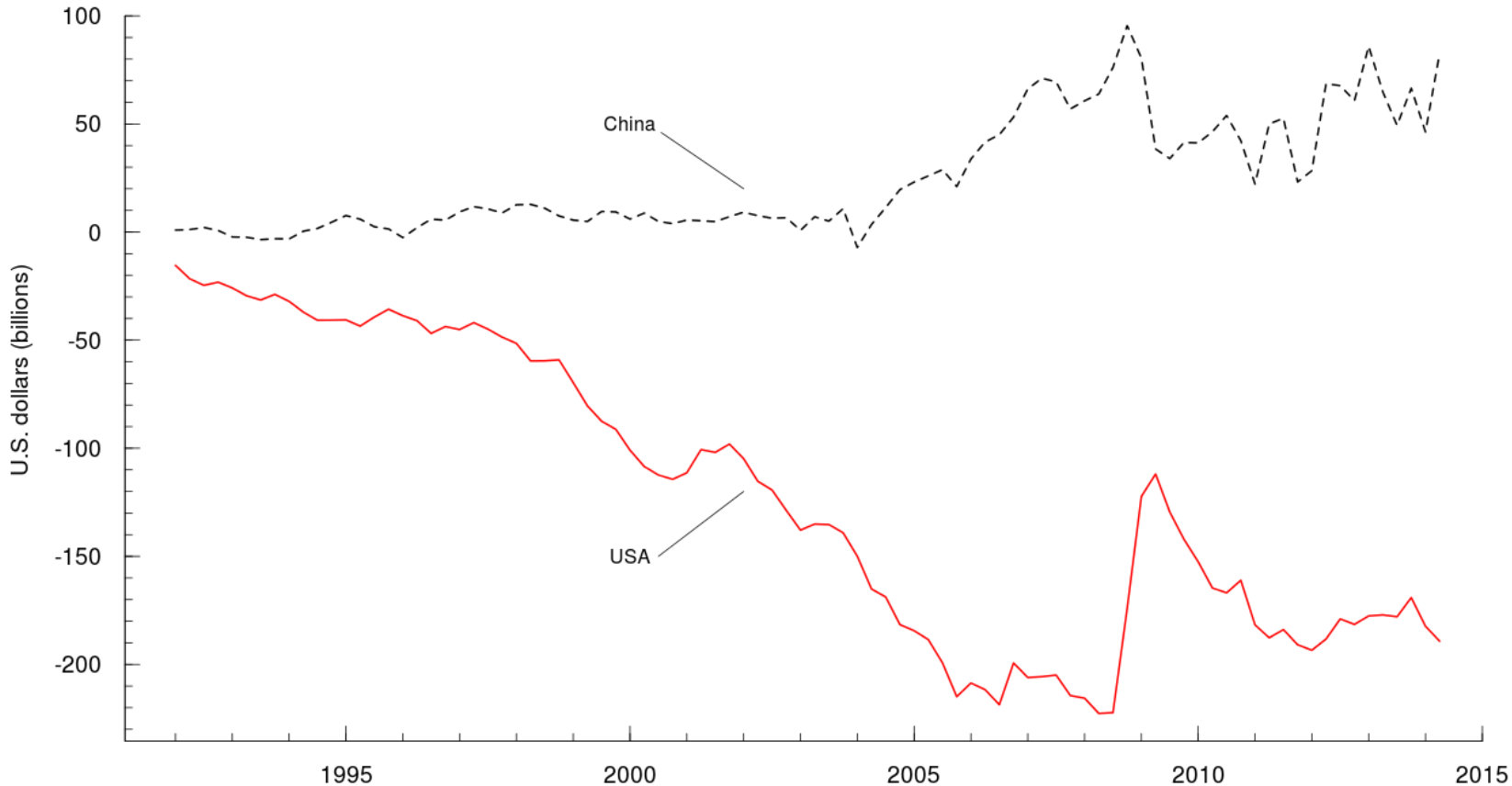
$$NX = X - M$$

- Trade surplus exists when a country exports more than it imports: $X > M$
- Trade deficit exists when a country imports more than it exports: $X < M$

Measuring international trade

Trade balances USA and China

Source: OECD



Measuring international trade

Bilateral trade balance USA and China

Source: US Census Bureau

Measuring international trade

Shortcoming of trade balance in case of bilateral trade

- Consider a lego minifigure:

- Valued at £2,- when imported to the UK from Denmark
- Item is produced in Denmark but:
  - The plastic comes from Taiwan
  - Paint produced in the Czech Republic
  - Packaging with material from Sweden
- Valued added in Denmark is £2-X, where X is the total value of the imported parts
- This doesn't show in the bilateral trade balance

Measuring international trade

Shortcoming of trade balance in case of bilateral trade

- Why does this matter?
  - Trade measures assume a country produces goods that are either consumed domestically or exported
  - If domestic production is insufficient or too costly it needs to import
  - Based on idea that country is a closed system that it in harmony with other countries
- In these terms a skewed trade balance can be interpreted as a certain weakness
- Misleading trade statistics can lead to controversy

Measuring international trade

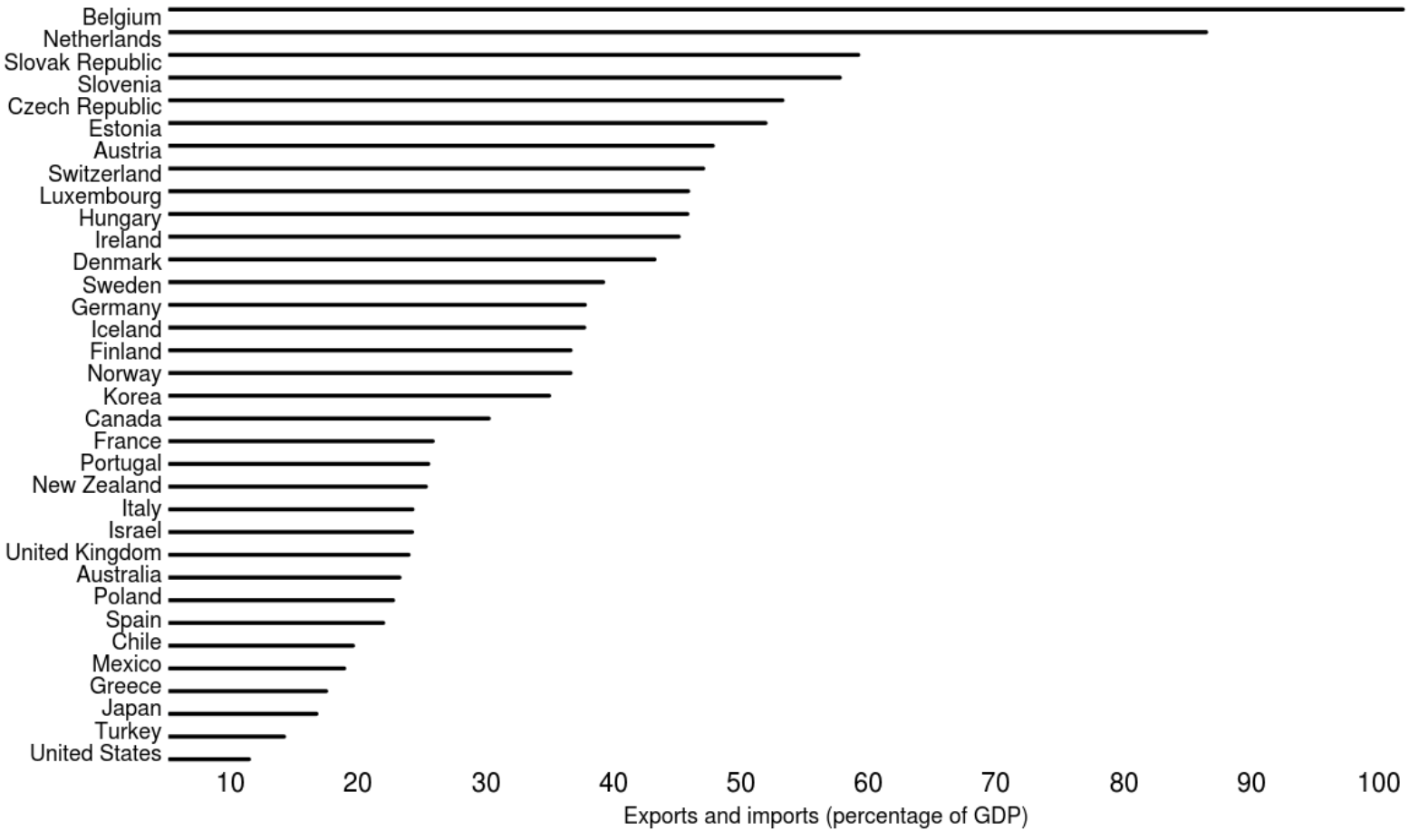
Trade to GDP ratio

- Measures trade intensity/openness of a country
- Most countries have high trade to gdp ratios
- Countries that serve as shipping and processing centres have high ratios (Belgium, the Netherlands, Malaysia)
- Countries with lower ratios are those with large economic values (USA) or those that have just started trading (most of South America)

Measuring international trade

Trade relative to GDP in OECD countries in 2013

Source: OECD



Measuring international trade

Terms of trade

- Relative price of exported goods versus imported goods

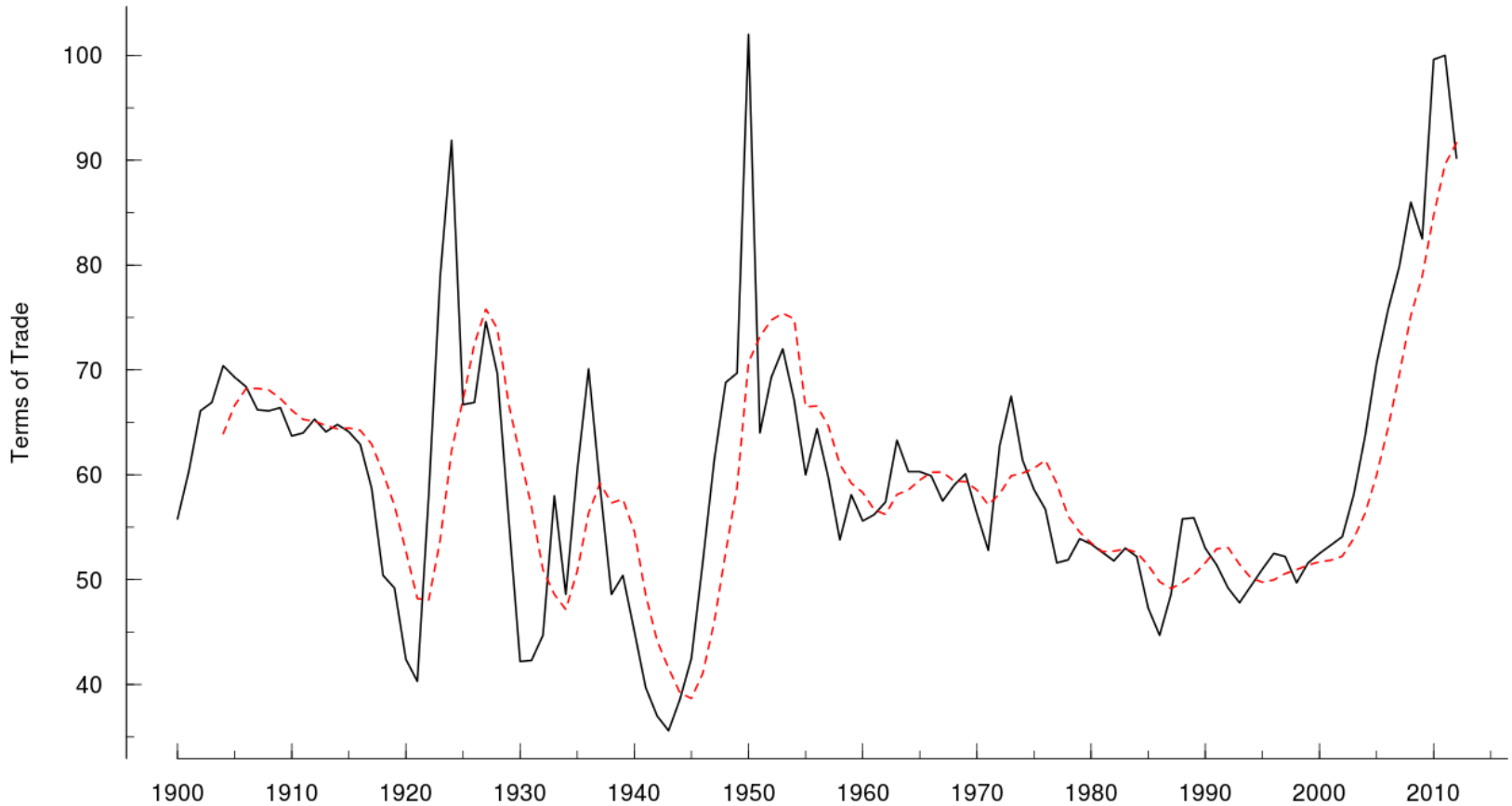
$$\frac{P_X}{P_M} * 100$$

- Terms of Trade increase if:
  - Export prices (P_X) increase
  - Import prices (P_M) decrease
- An increase in the Terms of Trade increases a country's *general* welfare
  - For every unit of export sold it can buy more units of imported goods

Measuring international trade

Term of trade Australia 1900-2012

Source: Australian Bureau of Statistics



Measuring international trade

However,

Source: BBC

Australia's budget deficit to widen by A$10bn

The government said delays in passing legislation and negotiations with the Senate had cost the budget more than $A10.6bn

Australia's government has said it expects the nation's deficit to grow to $40.4bn Australian dollars ($33.2bn; £21.2bn) in the 12 months to June.

Earlier in the year, the deficit for the period had been forecast to come in at A$29.8bn.

The country's treasurer, Joe Hockey, said falling prices for key export commodities had hurt the economy.

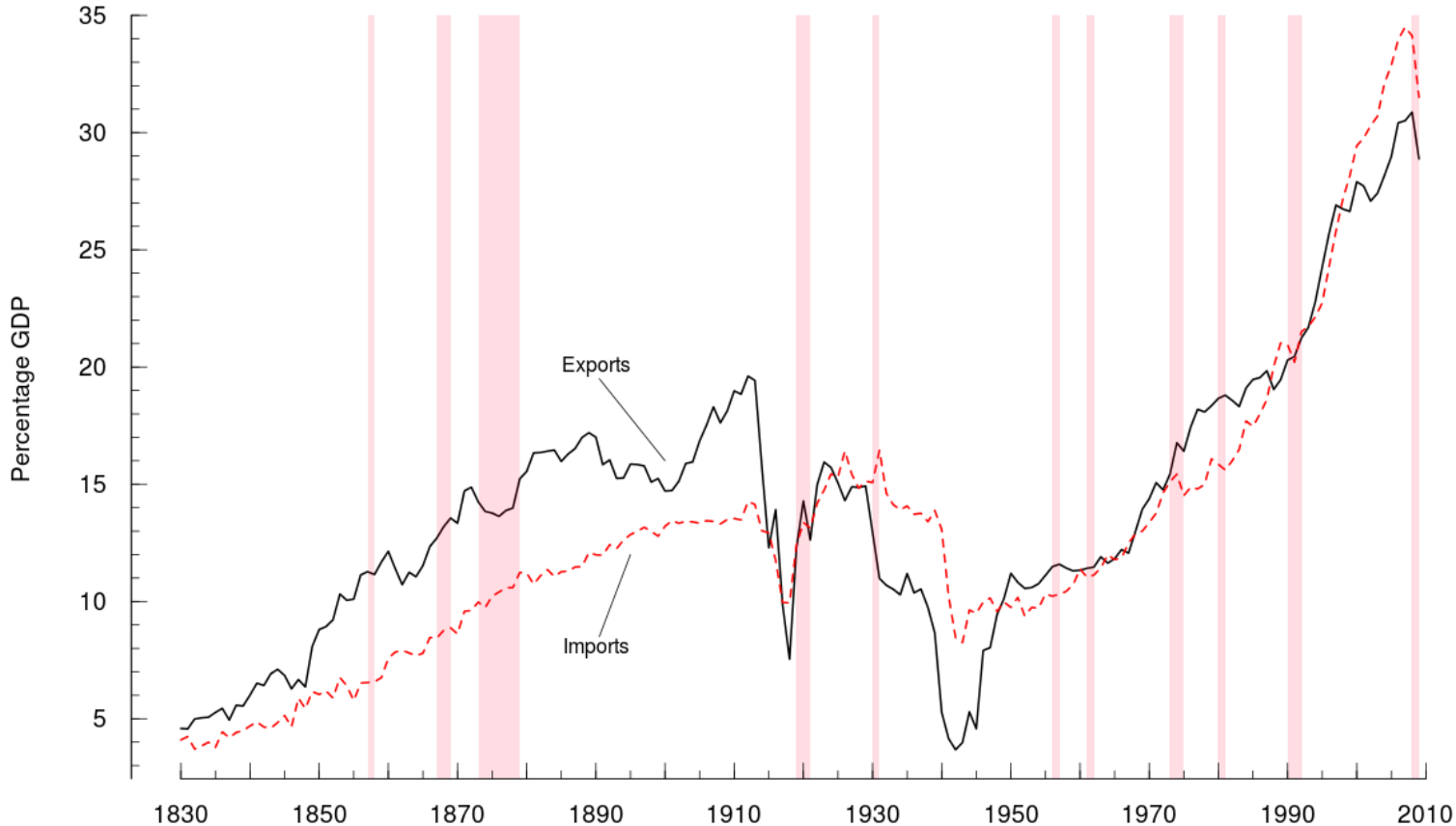
Related Stories

- Lower Australian consumer confidence
- Australia budget deficit could rise
- ABC budget to be cut by A$50m

Trade patterns

UK imports and exports over time as ratio of GDP

Source: Bank of England



Trade patterns

World trade shares per region for 2012

Source: WTO

Region	Exports	Imports
Africa	3.5	3.3
Asia	33.2	33.4
Commonwealth of Independent States	4.3	3.1
Europe	34.7	35.1
European Union internal trade	19.8	19.5
Middle East	7.3	3.9
North America	12.9	17.2
South and Central America	4.1	4.1

Trade patterns

- Trade within the European Union is large
  - Many countries
  - Zero tariffs on imports
- Asian trade rivals that of Europe
  - Cheap labour in China, Bangladesh, Vietnam, Cambodia
  - Efficient production of high quality goods in Japan and South Korea
- Former Soviet Union and the Middle East account for around 10% of world trade
  - Very large exports of oil and natural gas
- Trade from South and Central America is low but growing (e.g. Chile)
- Africa accounts for only 3.5% of world exports
  - Very marginal given its size and population
  - Mainly dependent on export of natural resources

Trade patterns

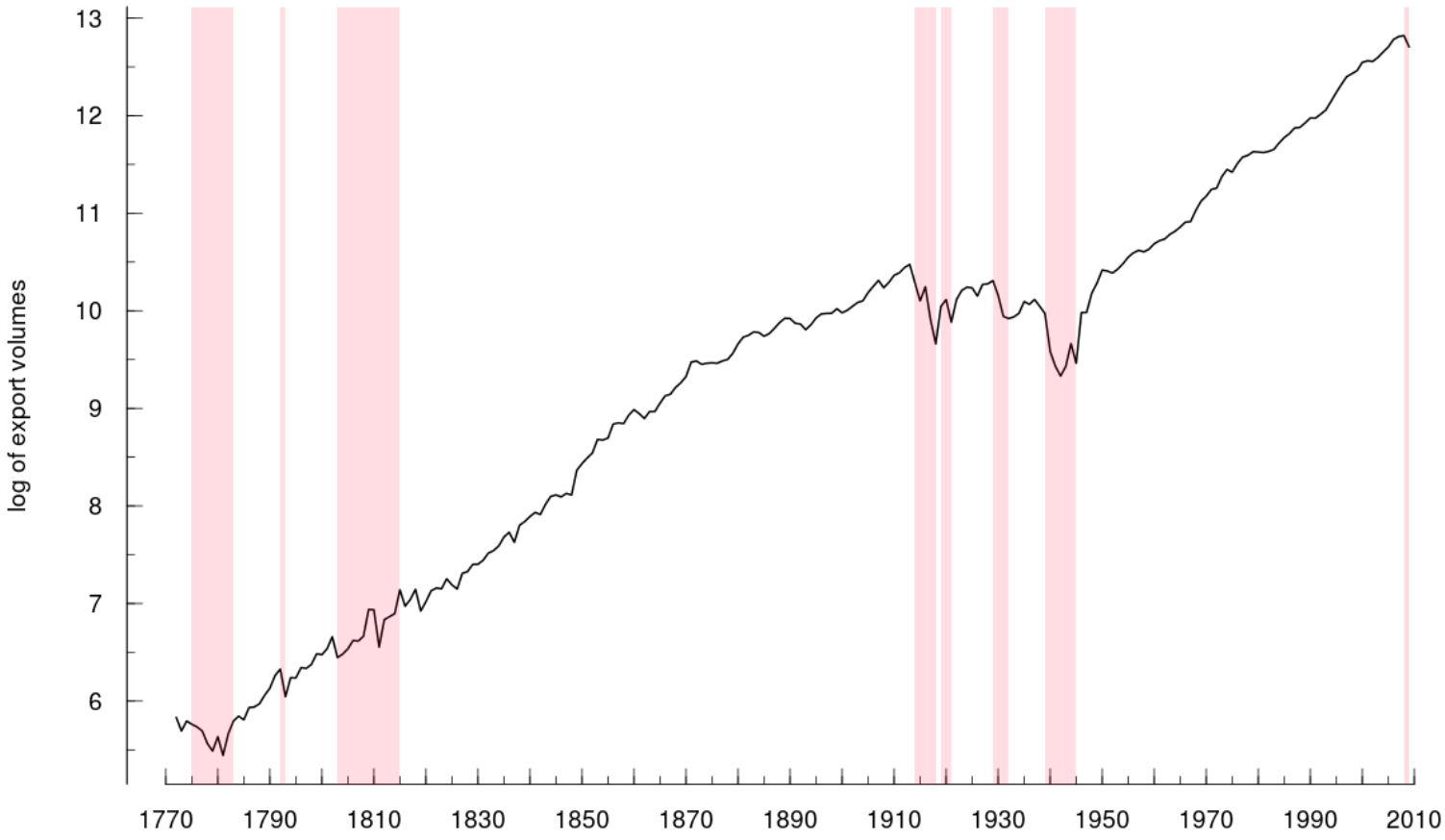
Barriers to trade

- Large differences in the amount of trade across countries and regions
  - Import tariffs, taxes that countries charge on imported goods
  - Transportation costs
  - Other events such as conflict
- Trade barriers refer to all factors that influence the amount of goods/services shipped across international borders
- Trade barriers change over time as a result of changes in policies, technology, etc.

Barriers to trade

UK export volumes 1772-2009

Source: Bank of England



Barriers to trade

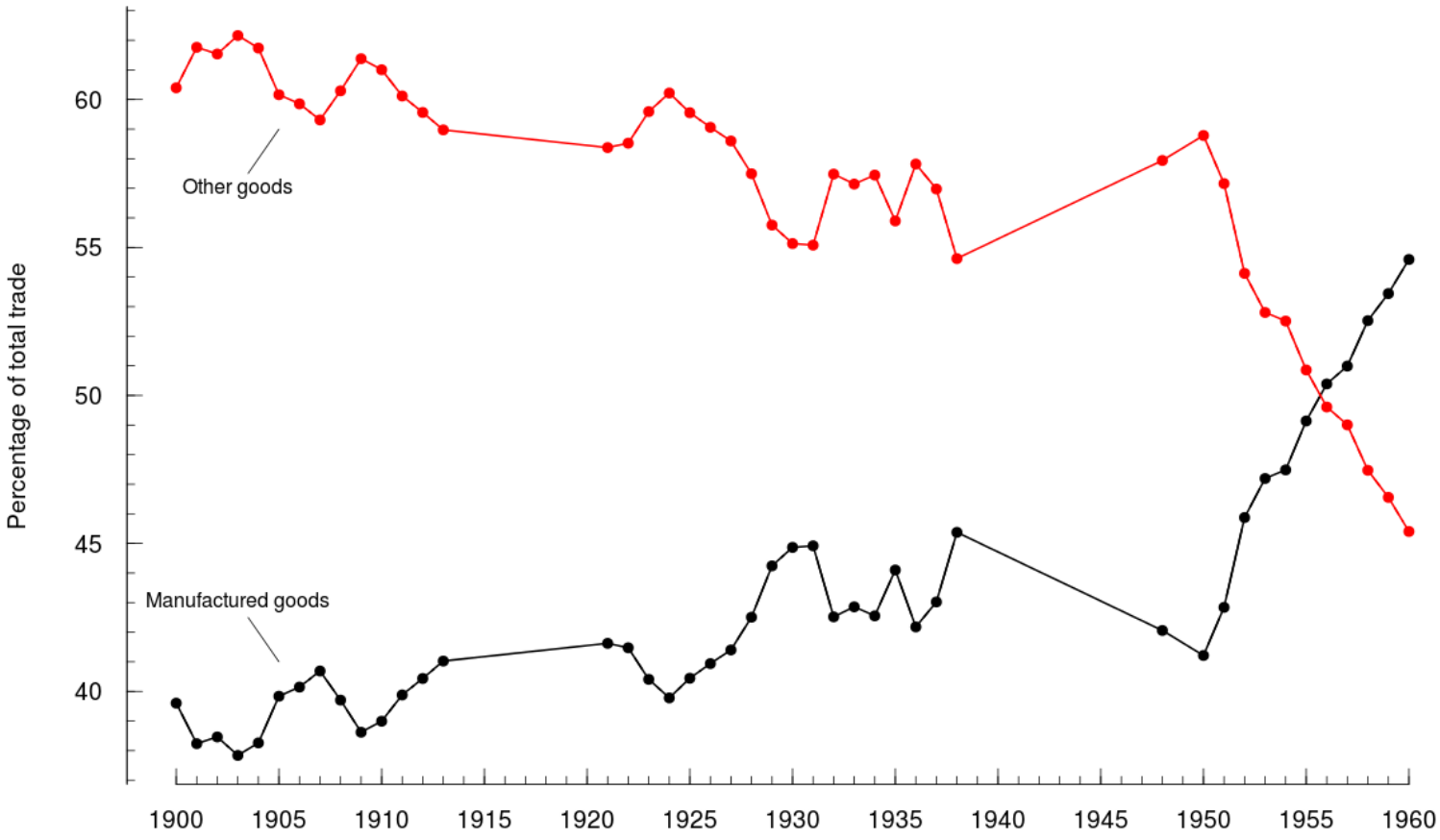
Trade over time

- 1st Golden Age: 1890-1913
  - Due to significant improvements in technology such as steamships, railroads, refrigeration
  - Ended with the beginning of World War One
- Interbellum: 1918-1939
  - Decrease in trade in Europe and Australia due to WWI and aftermath
  - Decline in trade across the world due to the Great Depression
  - Tariff war in reaction on Smoot-Hawley tariffs in the USA
  - Increase in world-wide tariff rate of 25%, decline in trade of around 33%
- 2nd Golden Age: 1950-present
  - After World War II, Allied victors agreed to keep tariffs low (established GATT)
  - Increase in trade back to WWI levels, many countries exceeding pre-WWI trade peak after 1950
  - Increases due to reduction in tariffs and improved transportation (invention of shipping container 1956)

Trade composition

Composition international trade 1900-1960

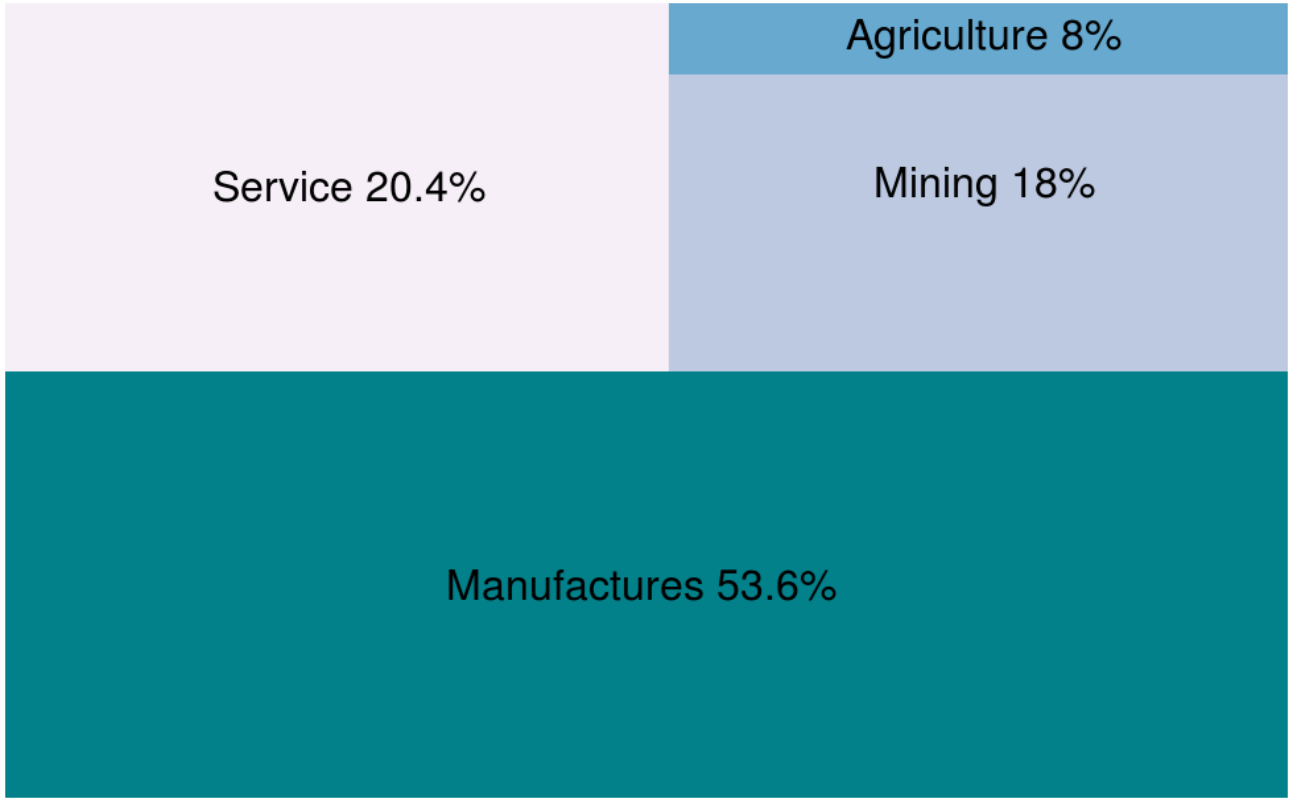
Source: UN International Trade Statistics 1900-1960



Trade composition

Composition of international trade 2013

Source: WTO



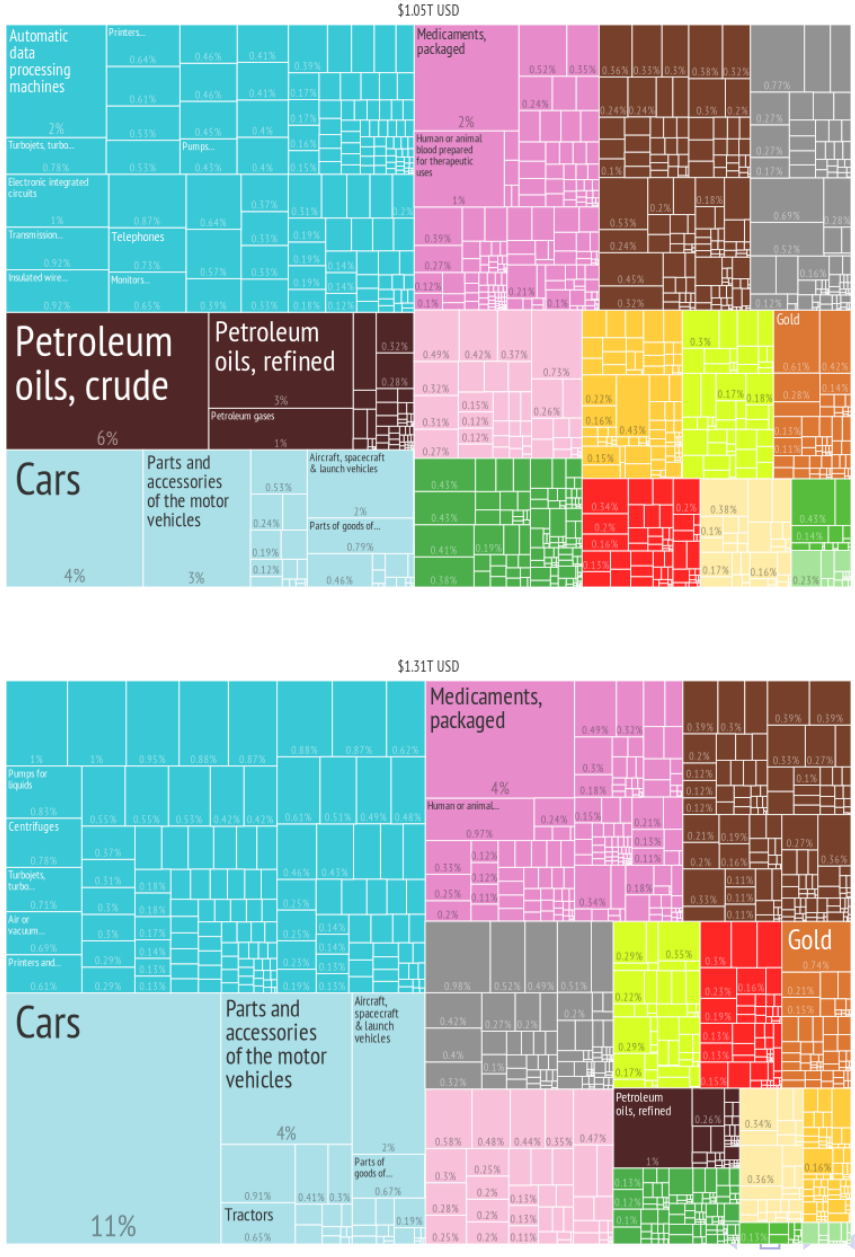
Trade composition

Today's composition of international trade

- Majority of trade volume is manufactured goods
  - Clothing from low-wage countries
  - Computers and automobiles from industrialised countries
- Services account for a 5th of trade volume
  - Includes shipping, tourism, and insurance
- Mineral products also roughly a 5th of trade volume
  - Fossil fuels from the Middle East, America, and Australia
  - Natural resources like copper from Chile and the Democratic Republic of the Congo
- Agricultural products are a relatively small part of international trade
  - Foodstuffs from the European Union
  - Cotton from India
  - Timber from West Africa

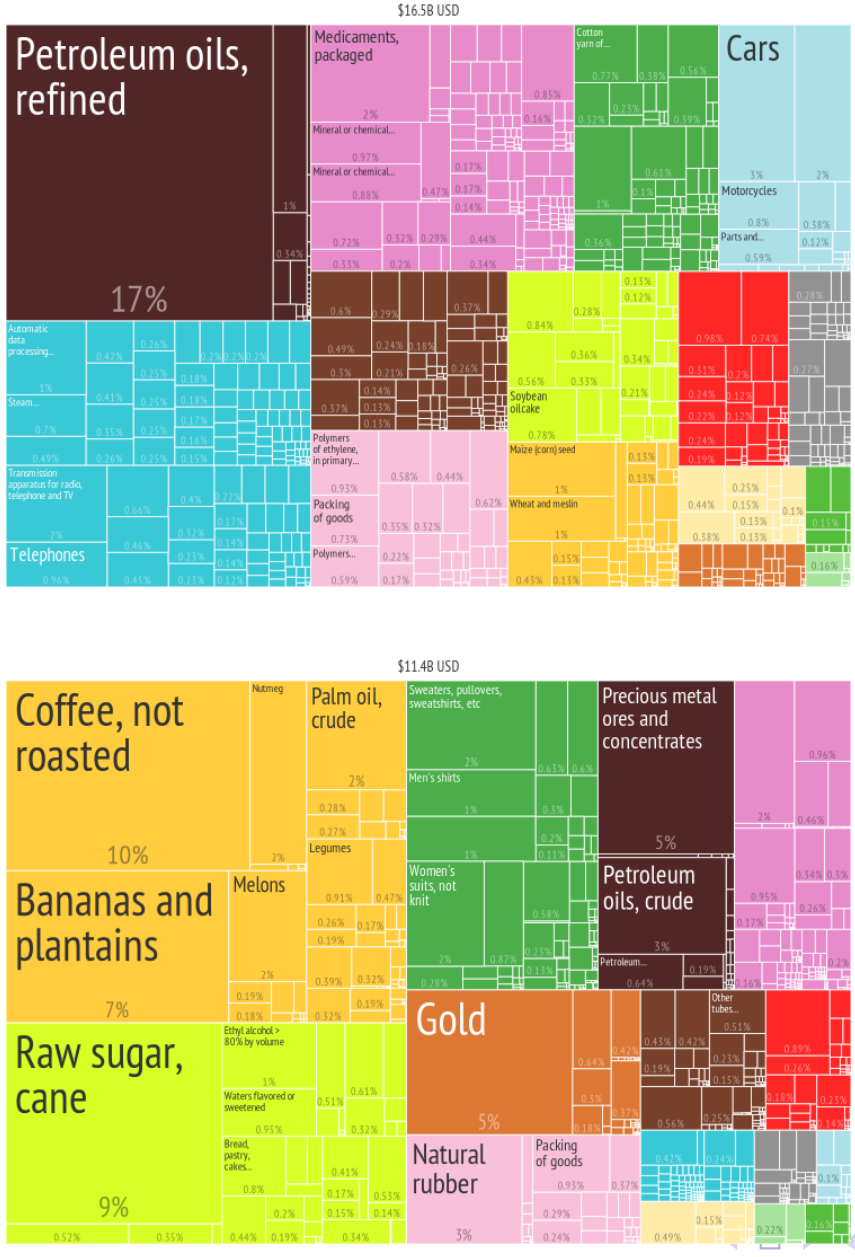
Trade composition

Imports *(top)* and exports *(bottom)* for 2012



Trade composition

Imports *(top)* and exports *(bottom)* for 2012



Trade composition

UK imports in 2012

- Bananas from Equador (68 Million US $)
- Lamb meat from New Zealand (441 Million US $)
- Oil from Kuwait (2 billion US $)
- Cars from Germany (17.2 billion US $)
- Turbojets from the USA (4.2 billion US $)

Trade composition

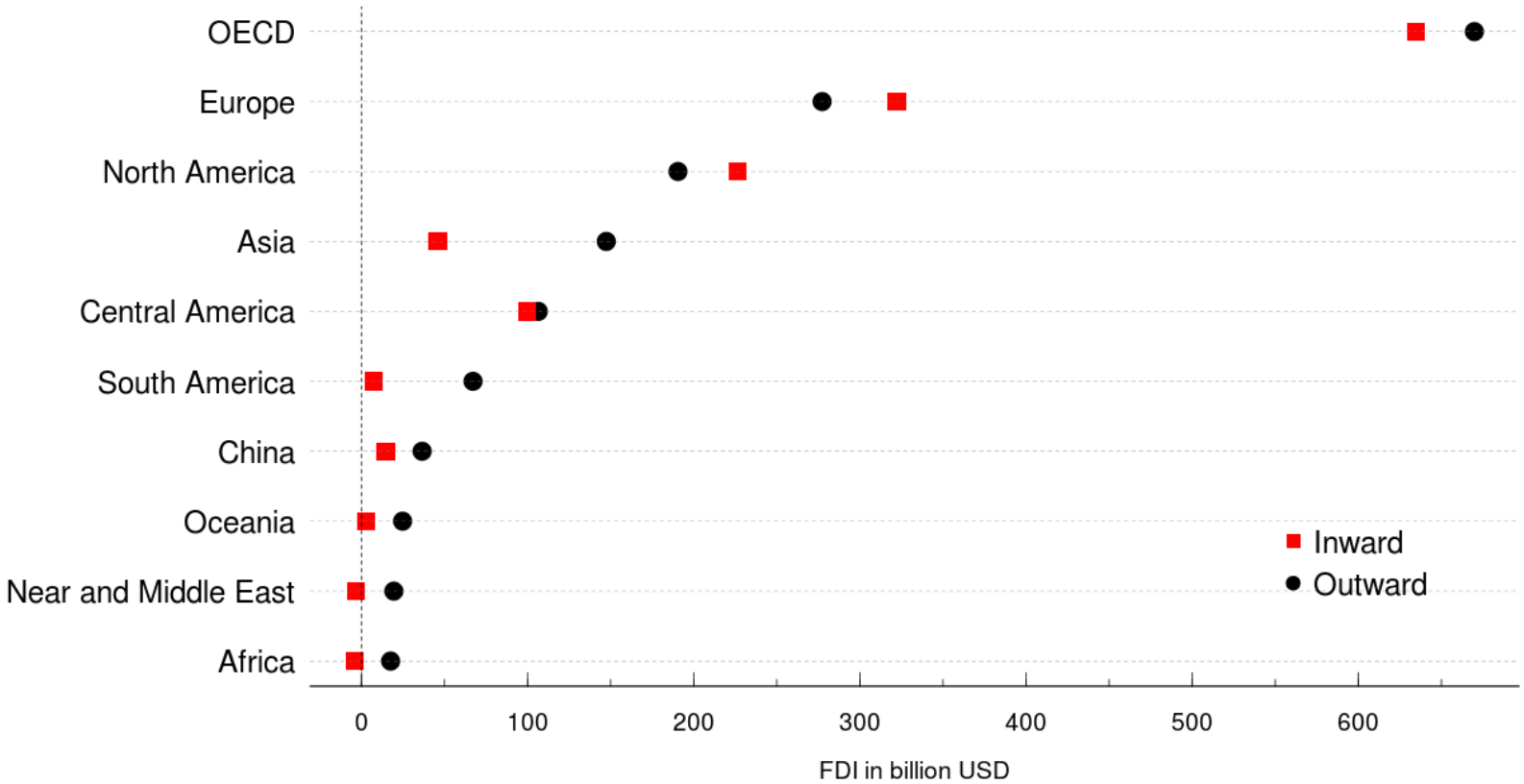
Drivers of differences in trade

- Differences in climate and natural resources explains why Equador exports bananas and Kuwait oil
- The fact that Germany exports cars and the USA turbojets stems from differences in:
  - Labour productivity
  - The relative supply of capital, labour, and land and their use in the production of different goods (and services)
- Mexico is the largest exporter of fresh tomatoes, which country is the second largest exporter?

Trade patterns

OECD Foreign Direct Investment flows for 2012

Source: OECD



Trade patterns

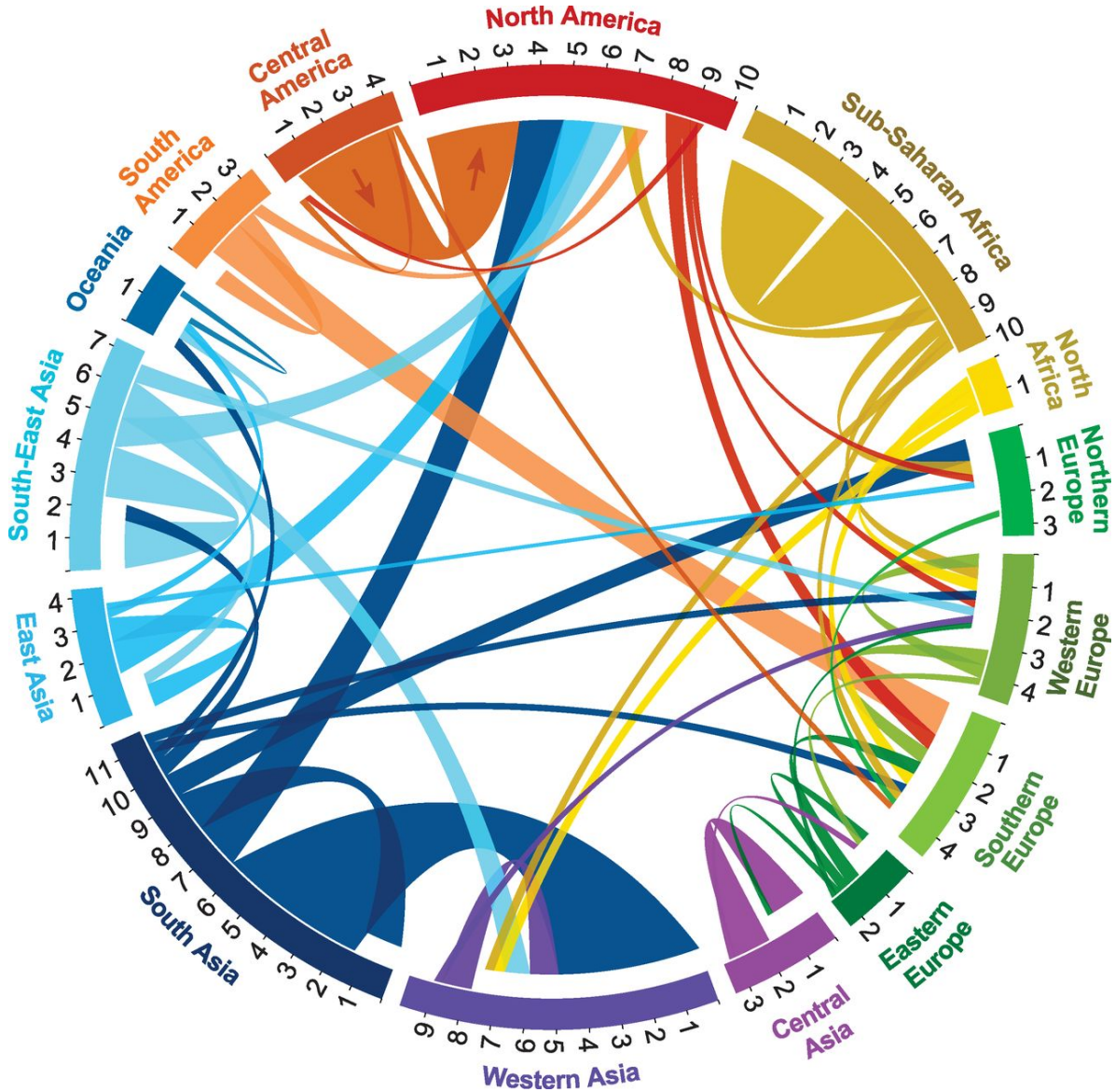
Foreign Direct Investment

- Horizontal FDI
  - Firm from country *i* owns company in country *j* that has same production activity as domestic (e.g. Toyota factory in Britain)
  - Allows firm to circumvent export tariffs or quotas
  - Better access to local market
  - Sharing of technical expertise
- Vertical FDI
  - Firm from country *i* owns a company in country *j* that operates a different stage of the production process (e.g. Zara producing clothes in Tunisia)
  - Predominantly firms from industrialised countries owning factories in low-wage countries

Trade patterns

Migration flows 2005-2010

Source: Abel and Sander (2014), Science



Trade patterns

International migration

- In contrast with trade and FDI most migration occurs in the developing world
- Most immigrants move within their own continent for employment or other reasons such as conflict
- Migration often stricter regulated than flow of goods
- International trade can potentially reduce flow of migrants
  - Trade can increase living standards of workers the same way moving to a higher-wage country can
  - More trade means more workers able to work in export industries