



Brussel en de politieke economie van de stad

1. Waarom steden bestaan: de voordelen van concentratie

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Why cities exist: the advantages of concentration

Economic activities

- Agriculture
- Industry and services: scale and agglomeration

The conditions of urbanisation

- Labour productivity in agriculture
- Spatial concentration of social surplus

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Agriculture is bound to land

area to be covered by production process until end of harvest

tools/machines and labour must move to cover the area

=> dispersion of agricultural population



Agriculture is bound to land

Size of settlements = balance between:

1. Collective advantages
=> concentration

- Common amenities and care
- Defence
- Social control



2. Individual advantages
=> dispersal

- Short distance to fields



Agriculture is bound to land

Size of settlements : opportunities and constraints

- Fertile soils = relatively high population densities = possibly large villages/towns
- Low fertility = low density = small settlements
- The more care needed (e.g. livestock), the closer fields/meadows to farm => small settlements
- The more extensive agriculture, the larger the fields => dispersed farms

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Industry and services: scale and agglomeration economies

Industry and services not bound to land surface

raw material moved to be processed by tools/machines and labour force on fixed place

= concentration of labour force and raw materials around means of production

= scope for scale and agglomeration economies



Industry and services: scale and agglomeration economies

Economies of scale:

For 18.000 TEU:

1956: 30 captains

and 1470 sailors

= 12 TEU/crew member

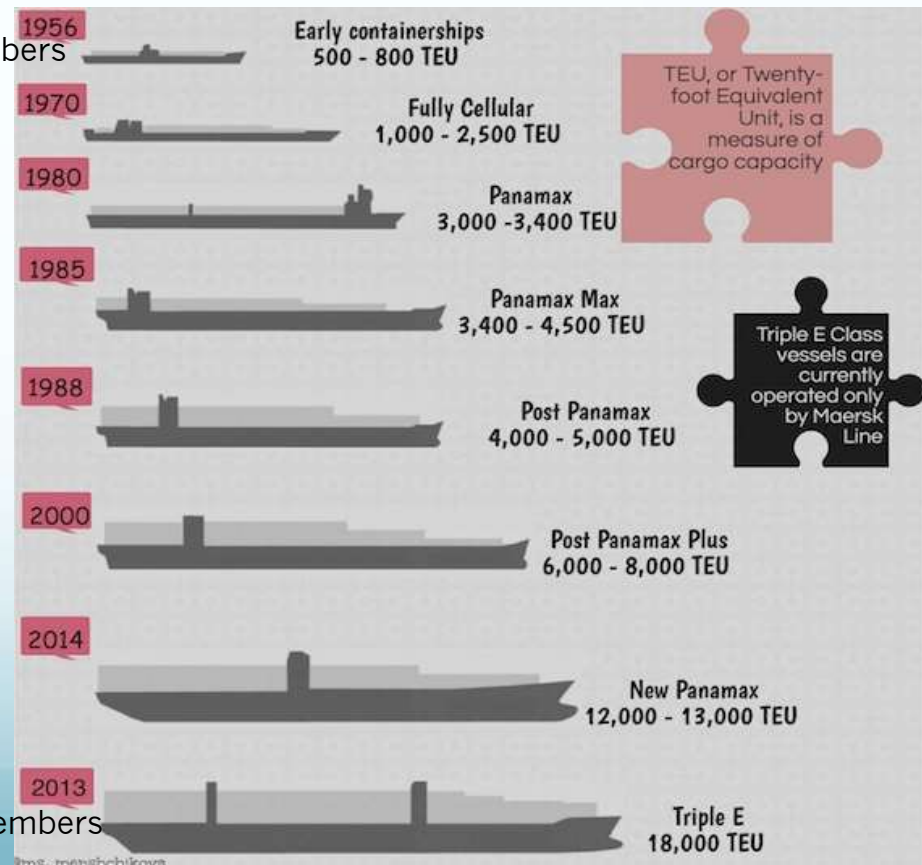
2013: 1 captain

and 12 sailors

= 1385 TEU/crew member

Evolution of containerships

1 TEU = 1 container 6m

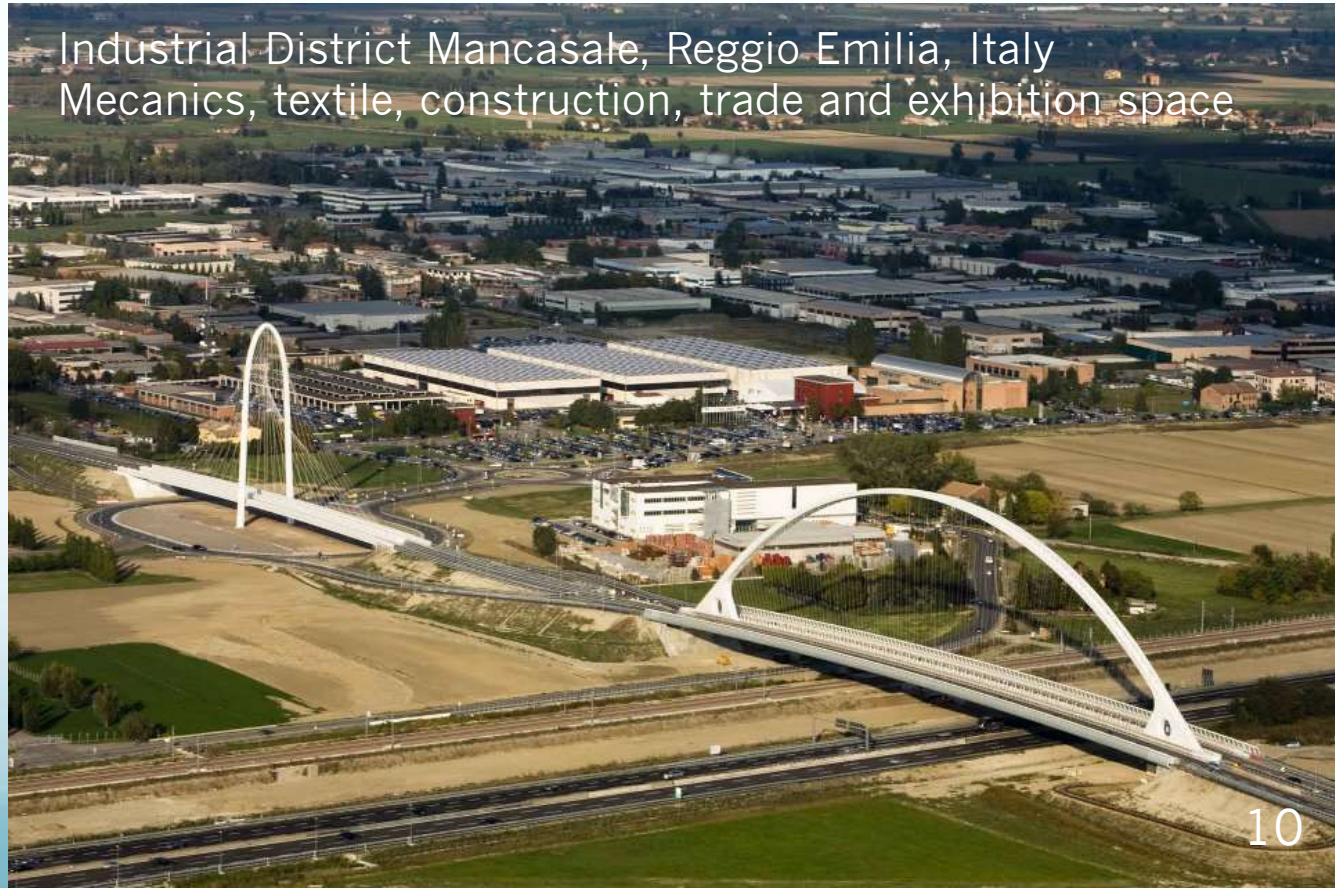


Industry and services: scale and agglomeration economies

Agglomeration economies:

Advantages related to concentration of different firms

Industrial District Mancasale, Reggio Emilia, Italy
Mechanics, textile, construction, trade and exhibition space



Industry and services: scale and agglomeration economies

Growth of firms: internal scale economies

Spatial concentration of firms: external scale economies or agglomeration economies

Growing production and concentration of population = urbanisation

Industry and services: scale and agglomeration economies

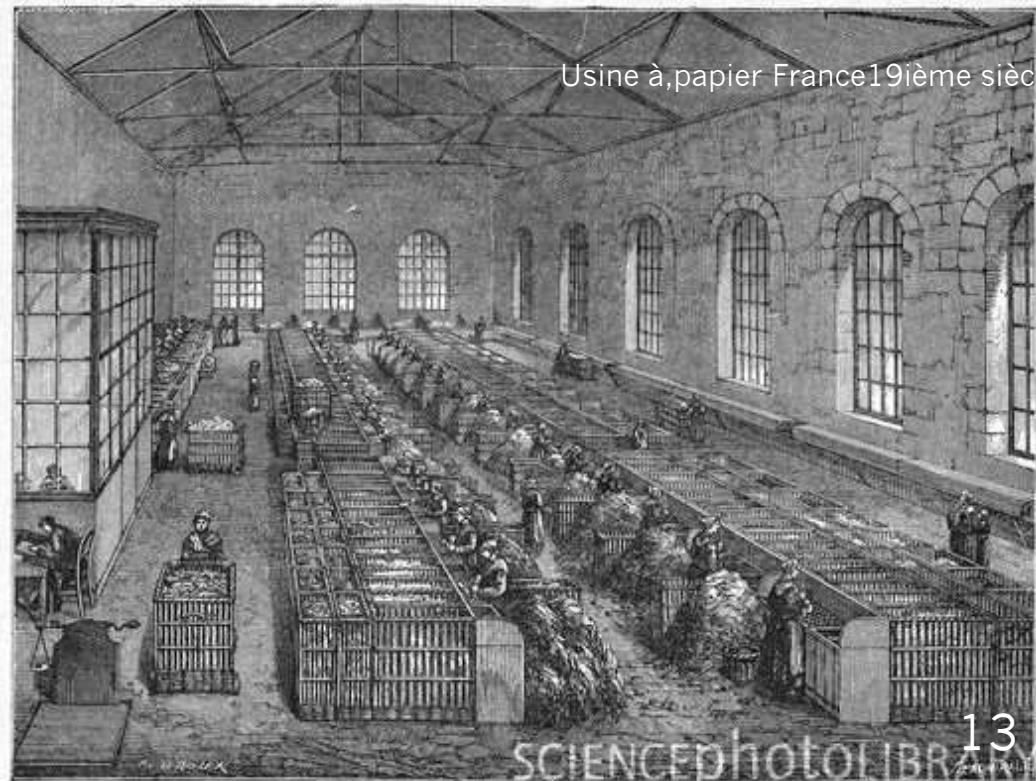
Growth of firms: internal scale economies

Importance for urban economic development:
growth of firms in the city
= growth of the city

but possible segmentation and delocalisation

Growth of firms: internal scale economies

1. From putting-out system (homework for a merchant) to manufacture (factory work with the same tools)





1. From putting-out system (homework for a merchant) to manufacture (factory work with the same tools)

- division of tasks and specialisation (de-skilling)
- equipment fully employed
- no waste of moving from one to another task
- low training costs
- input and output management and process control
=> office labour (new task in division of labour)

=> Single productivity increment without technological change

=> Further growth = increasing amount of low-skilled labour

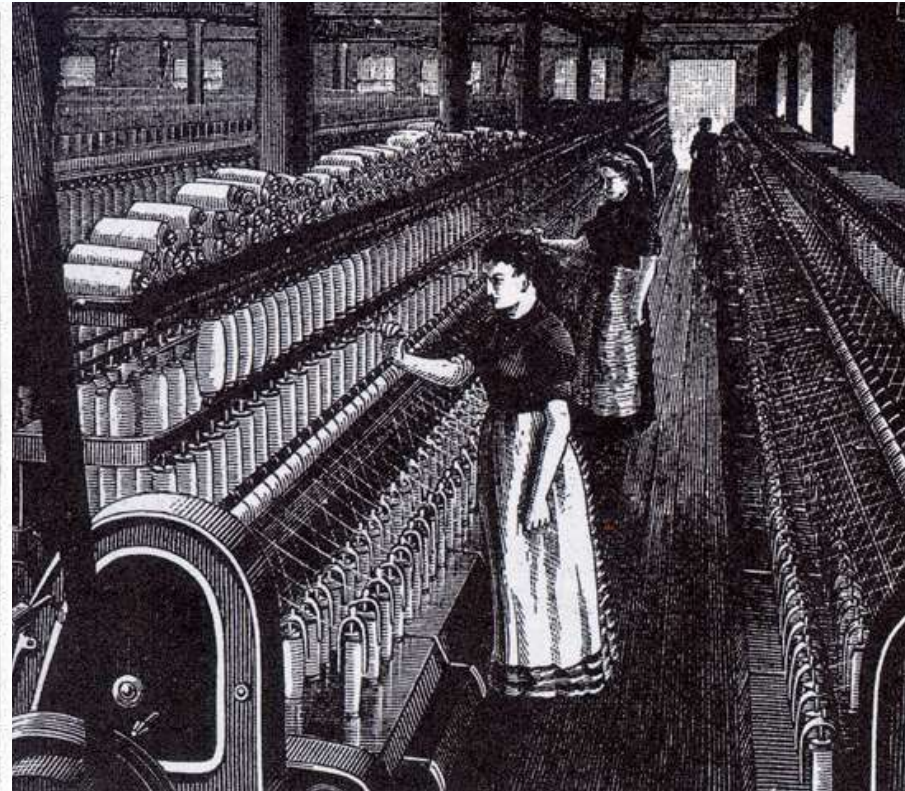
$$Q \text{ (quantity of production)} = P \text{ (productivity)} * L \text{ (labour)}$$

$$\Rightarrow \Delta Q = P * \Delta L$$

= urban population growth, but poor growth of consumption

Growth of firms: internal scale economies

2. From manufacture to industry (from tools to machines)

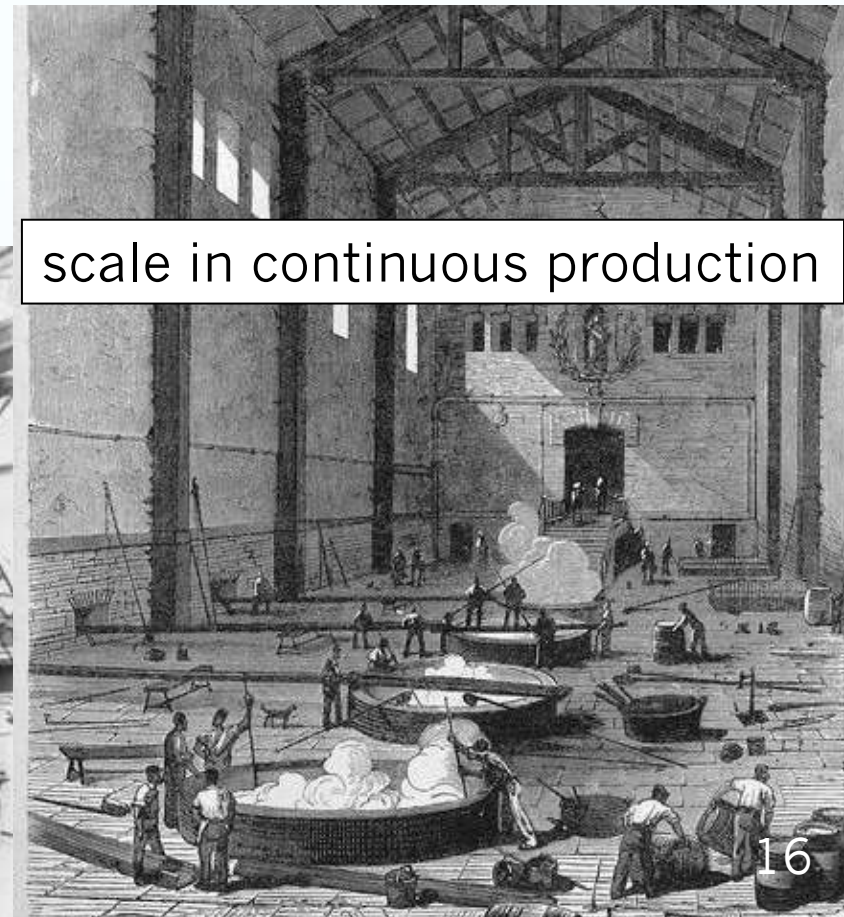
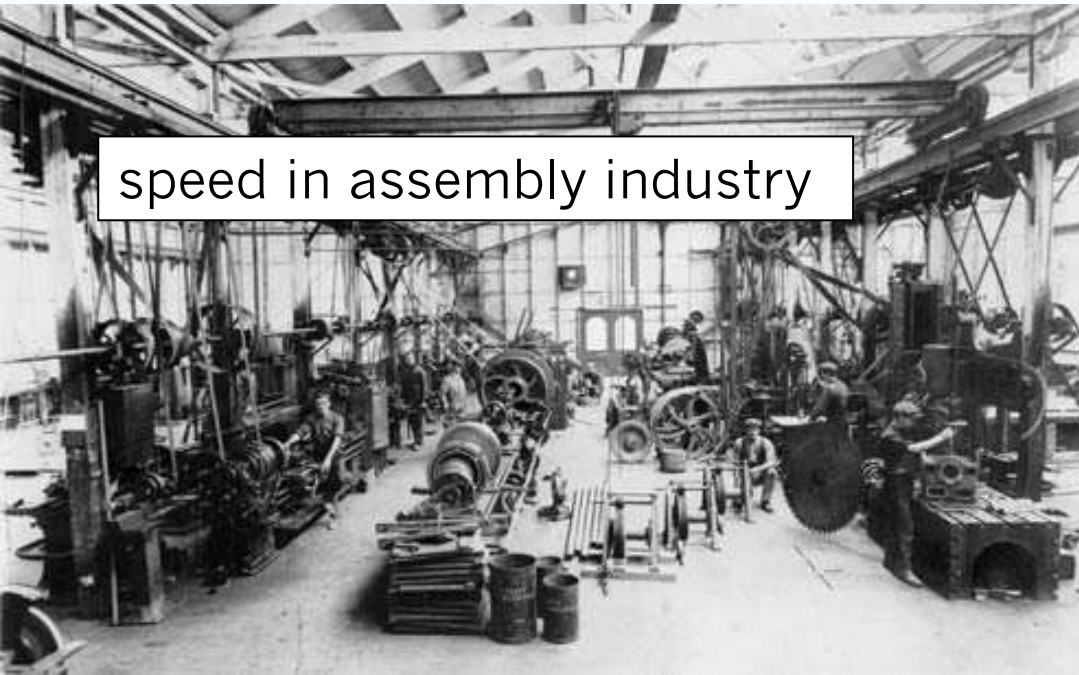


Growth of firms: internal scale economies

2. From manufacture to industry (from tools to machines)

- incorporating skills in machines (further deskilling)
- scale and speed of machines

=> increasing productivity



Growth of firms: internal scale economies

2. From manufacture to industry

Increasing division of labour

- Unskilled labour
- Management labour
- Technical labour (machine maintenance and repair)

Increasing employment if production increases faster than productivity

$$L=Q/P$$

also dependent on labour time per employment: $L= T_y * W$

T_y = yearly labour time per worker

W =number of workers

=> relative increase of skilled labour and middle class

= urban population growth dependent on productivity vs production growth

Industry and services: scale and agglomeration economies

Growth of firms: internal scale economies

Spatial concentration of firms: external scale economies or agglomeration economies

Growing production and concentration of population = urbanisation

External scale economies or agglomeration economies

- Firm linkages
 - Interfirm linkages (input – output)
 - Segmentation and vertical disintegration to maximise internal scale economies
 - Production services
 - Infrastructure
 - Public utilities



External scale economies or agglomeration economies



Advantages of agglomeration (externalities)

Alfred Marshall (1890)

- Knowledge spillovers (variety and complexity of information => tacit knowledge – not transferable by words and symbols)
- Input sharing (specialised local input providers and economies of scale)
- Labour market pooling (specialised pools of skilled labour and better match)

=> Increase in economic efficiency

External scale economies or agglomeration economies



Advantages of agglomeration (externalities)

- Marshall (1890) emphasises industrial clusters
= localisation economies
- Jane Jacobs (1969) emphasises diversity
cross-fertilisation of different knowledges and technologies => innovation and growth
= urbanisation economies

External scale economies or agglomeration economies

More agglomeration economies

- Home market effects:
large local consumption market because ΔL
or because ΔP partly transformed into wage rises
=> attraction of new firms
 - Consumption thresholds:
Threshold for amenities (culture, health, education...)
=> specialisation with size
Density and number and speed of interactions
 - Rent-seeking:
e.g. Bread in imperial Rome
tax relief in Naples
- <=> mega-cities, urban primacy and inefficiency

External scale economies or agglomeration economies

Nature, time and space of agglomeration economies

- Industrial scope
 - Localisation
 - Urbanisation
- Geographical scope
 - Proximity and interaction
- Temporal scope
 - Time separated interactions => learning regions

=> Dependent on industrial, geographical and temporal distance

External scale economies or agglomeration economies

Importance of institutions:

- Fiscal policy
- Research and education
- Social networks
- ...

City versus countryside

Agriculture bound to land
=> Homogeneity of
farmers dispersed over
countryside



Industry and services: scale
and agglomeration
=> Heterogeneity of
population concentrated
in cities



Why cities exist: the advantages of concentration

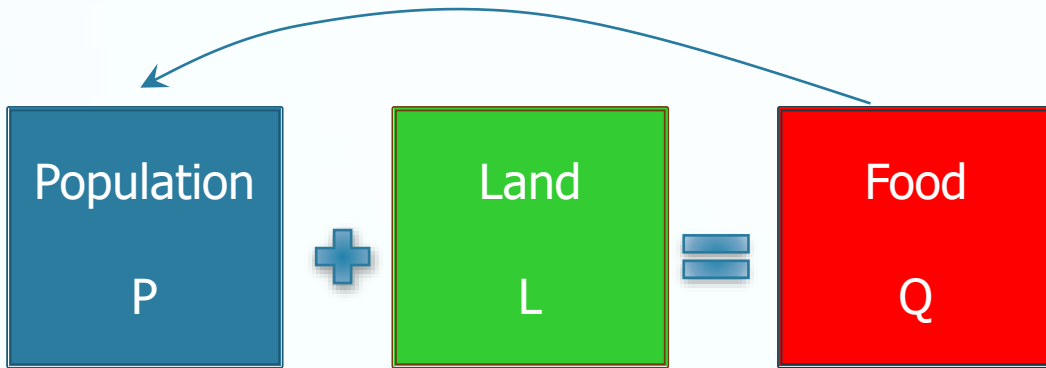
Economic activities

- Agriculture
- Industry and services: scale and agglomeration

The conditions of urbanisation

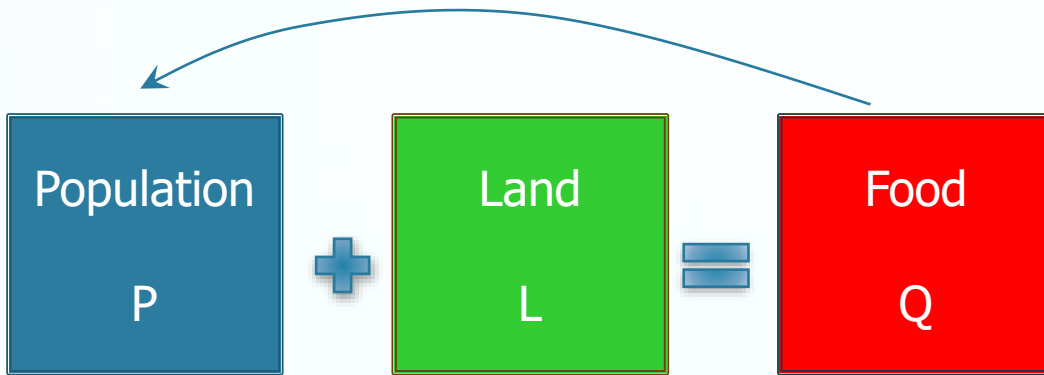
- Labour productivity in agriculture
- Spatial concentration of social surplus

Population, land and food



Population works on land
and produces means of existence
to maintain its life
Only countryside

Population, land and food

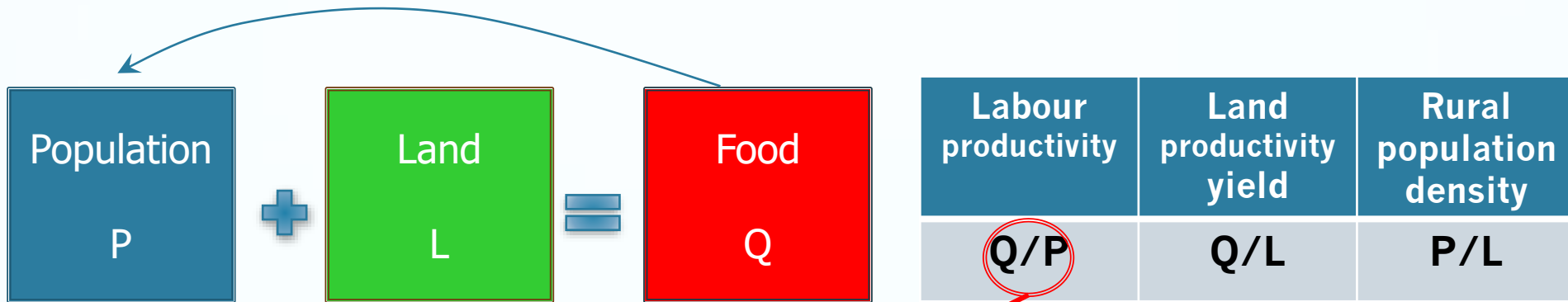


Labour productivity	Land productivity yield	Population density
Q/P	Q/L	P/L

Three basic relations between population, land and food:

- Labour productivity
- Land productivity
- Population density

Population, land and food

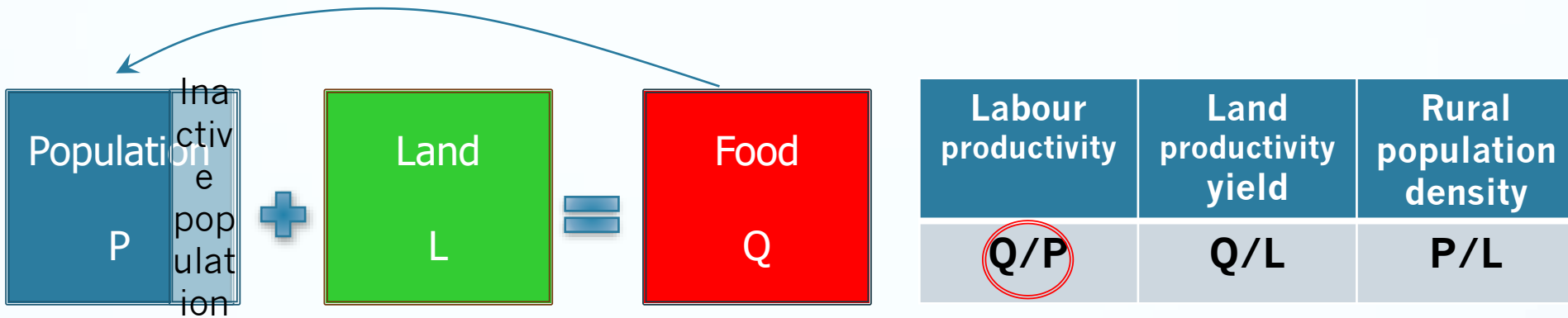


Europe: change between 1890-2010: * 200 * 7 / 14

Labour productivity increases driven by market competition
 => grain per farmer per year:
 end 19th century: 5 ton on 10 ha
 today: 1000 ton on 150 ha
 => agro-industry (inputs and output controlled by TNCs)
 => food contains less labour time=lower value
 => lower prices

Other sources of productivity gains in history

Population, land and food



When labour productivity increases:

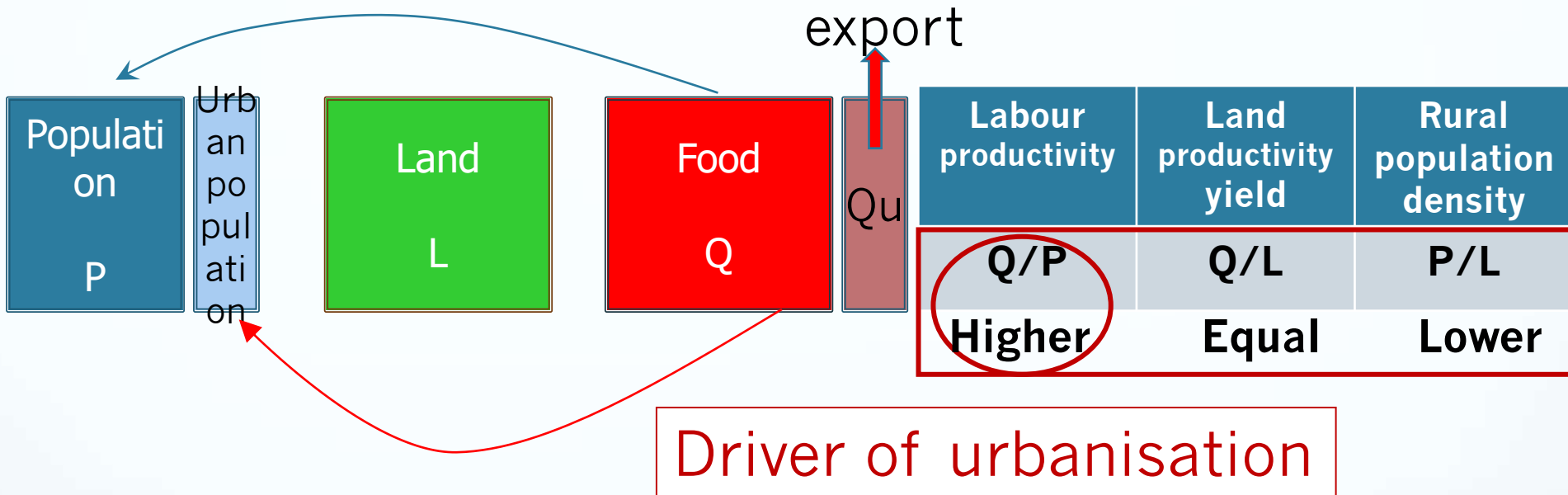
Less population is needed to produce Q

Part of population free from producing Q

What will that population do?

One answer (among more...)

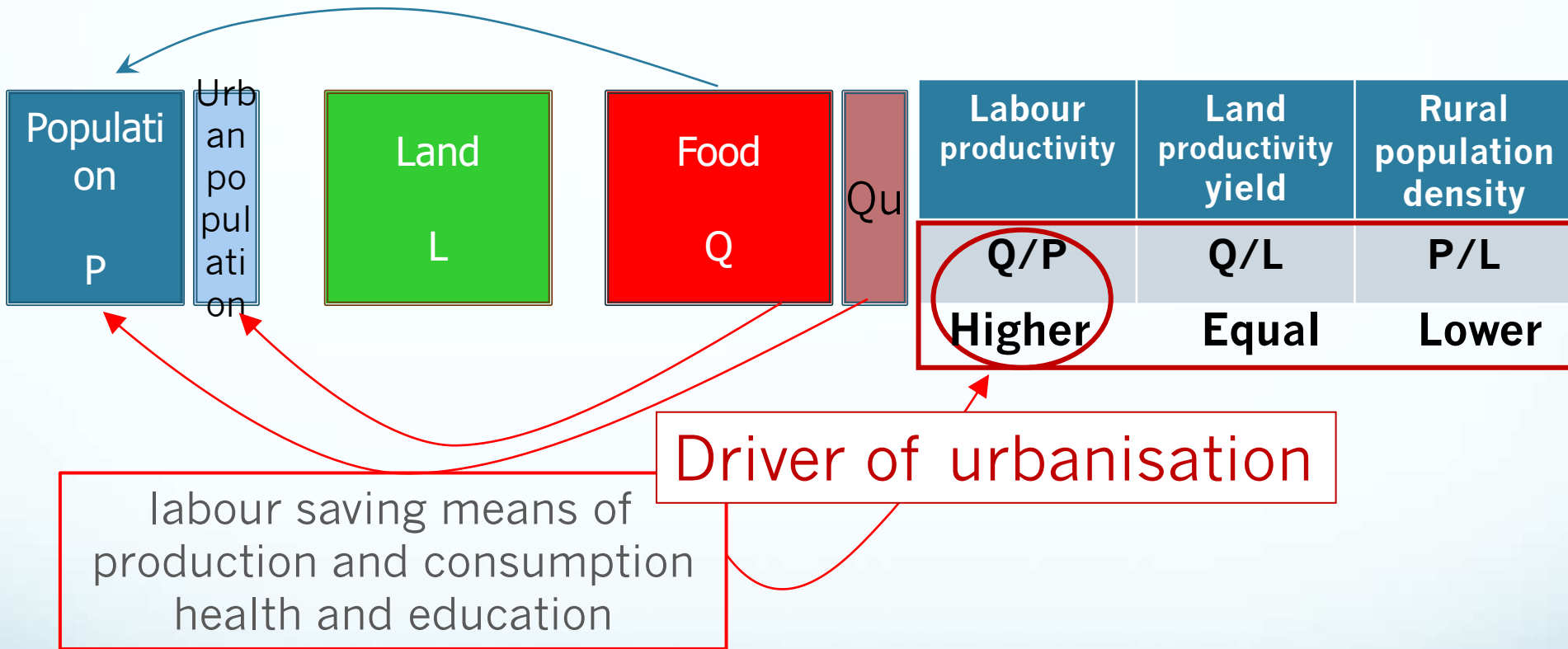
Population, land and food



Free population performs non-agricultural activities
 => crafts, industry and services => urbanisation
if no more land is available

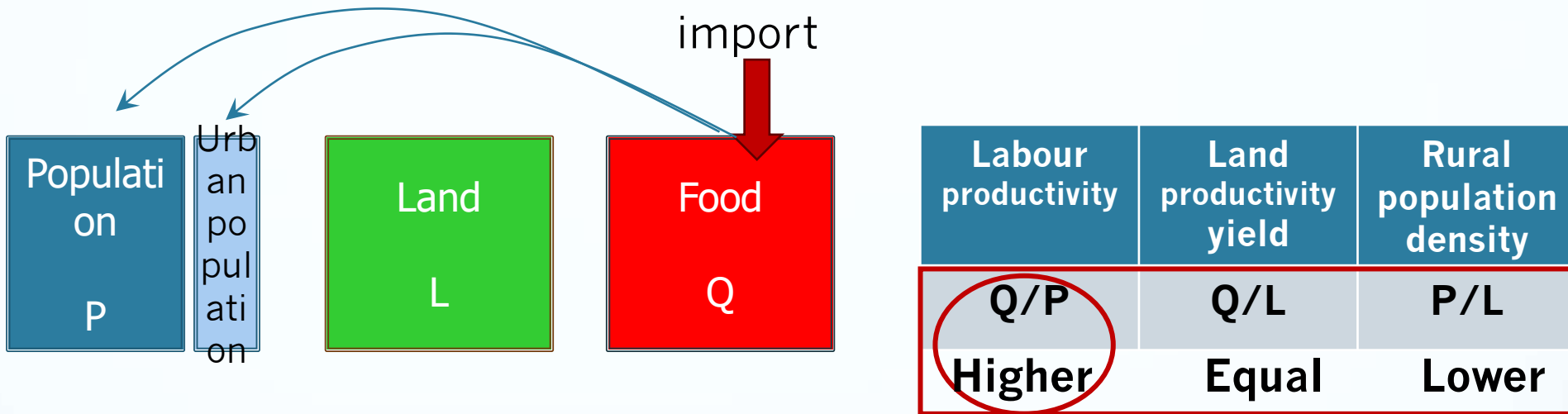
Urban product Q_u can be exported
 => urban population needs to force rural population
 to produce part of Q for them

Population, land and food



Urban product Q_u can be exchanged for food
 Q_u exchanged against Q
 \Rightarrow source of further Q/P increase
 and further urbanisation

Population, land and food



Driver of urbanisation

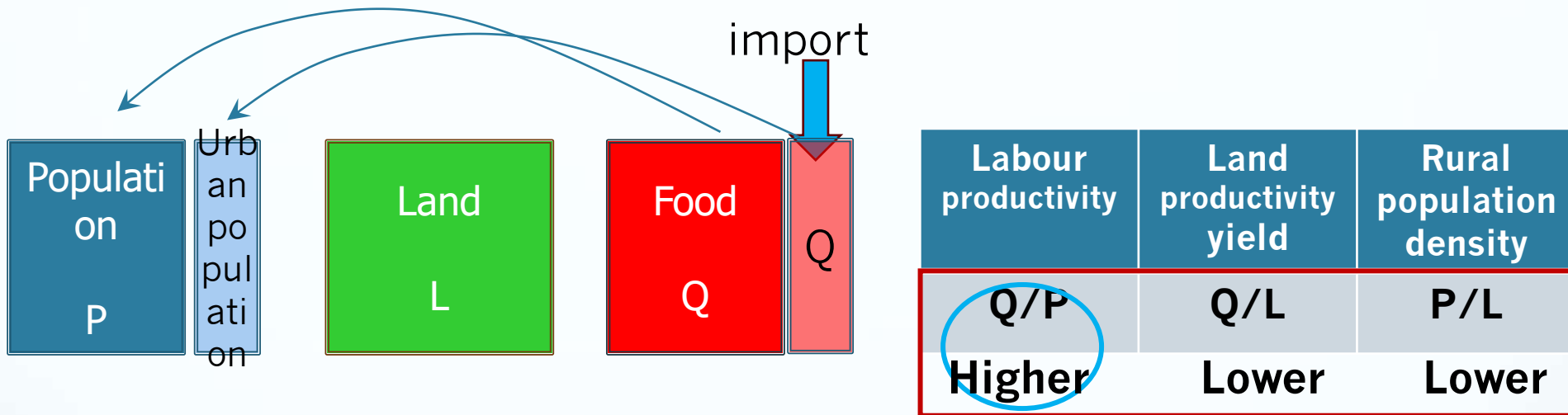
In global economy:

labour productivity increase in **developed countries**

=> poor farmers in **developing countries** loose competition and increase urban poverty

=> population fed with subsidized cheap food from developed countries

Population, land and food



Driver of urbanisation

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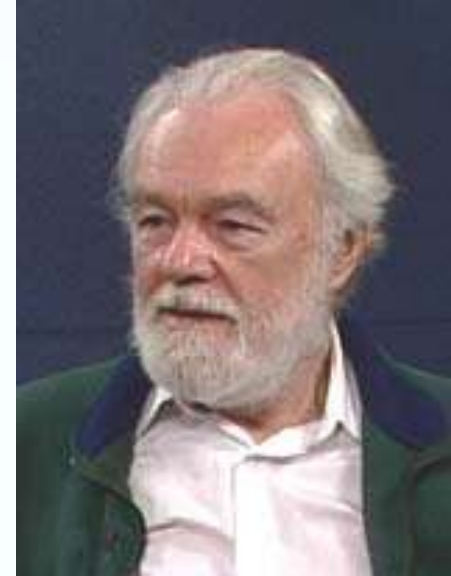
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- Labour productivity in agriculture
- **Spatial concentration of social surplus**

The conditions of urbanisation



David Harvey (1973):

“Cities are spatial concentrations of social surplus”

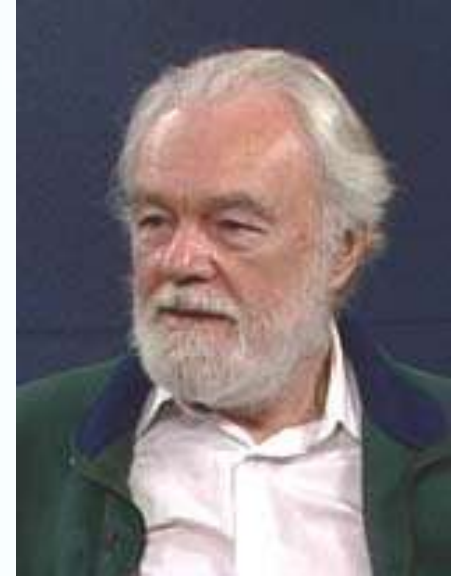
=> Three conditions:

=> creation of social surplus product (technology)

=> appropriation of surplus product (power)

=> spatial concentration of surplus product (transport)

The conditions of urbanisation



Theories on origins of cities based on urban functions

- Religious cities
- Military cities (defense and expansion)
- Administrative cities (irrigation)
- Trade cities (controlled trade and later free trade)

Which social group has the power to appropriate and concentrate surplus?

What is the basis of its power?

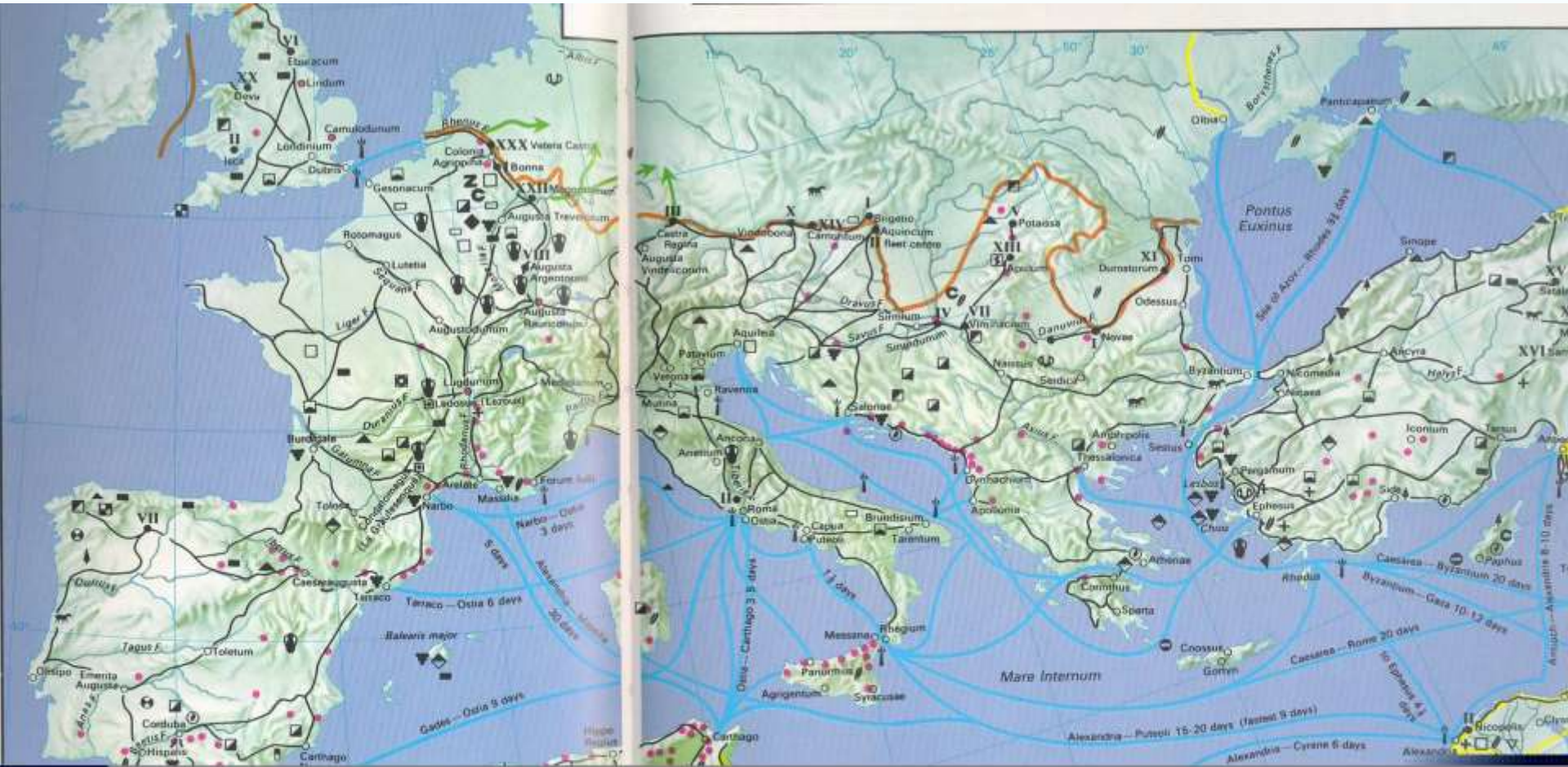
Precapitalist redistribution cities vs capitalist market cities

Roman Empire

Cities as military and administrative centres

- Tax system, areal expansion and land road system
- Planned cities, military organisation, walls, cosmological symbolism
- In Belgium: Tongeren and Doornik

Cities and roads of the Roman Empire



Urban revival in the Middle Ages

Cities as production sites for rural hinterland

- Decline of the manor system, concentration of crafts in the cities
=> local markets with rural hinterland:

Urban product – Money – Rural product

$C - M - C'$

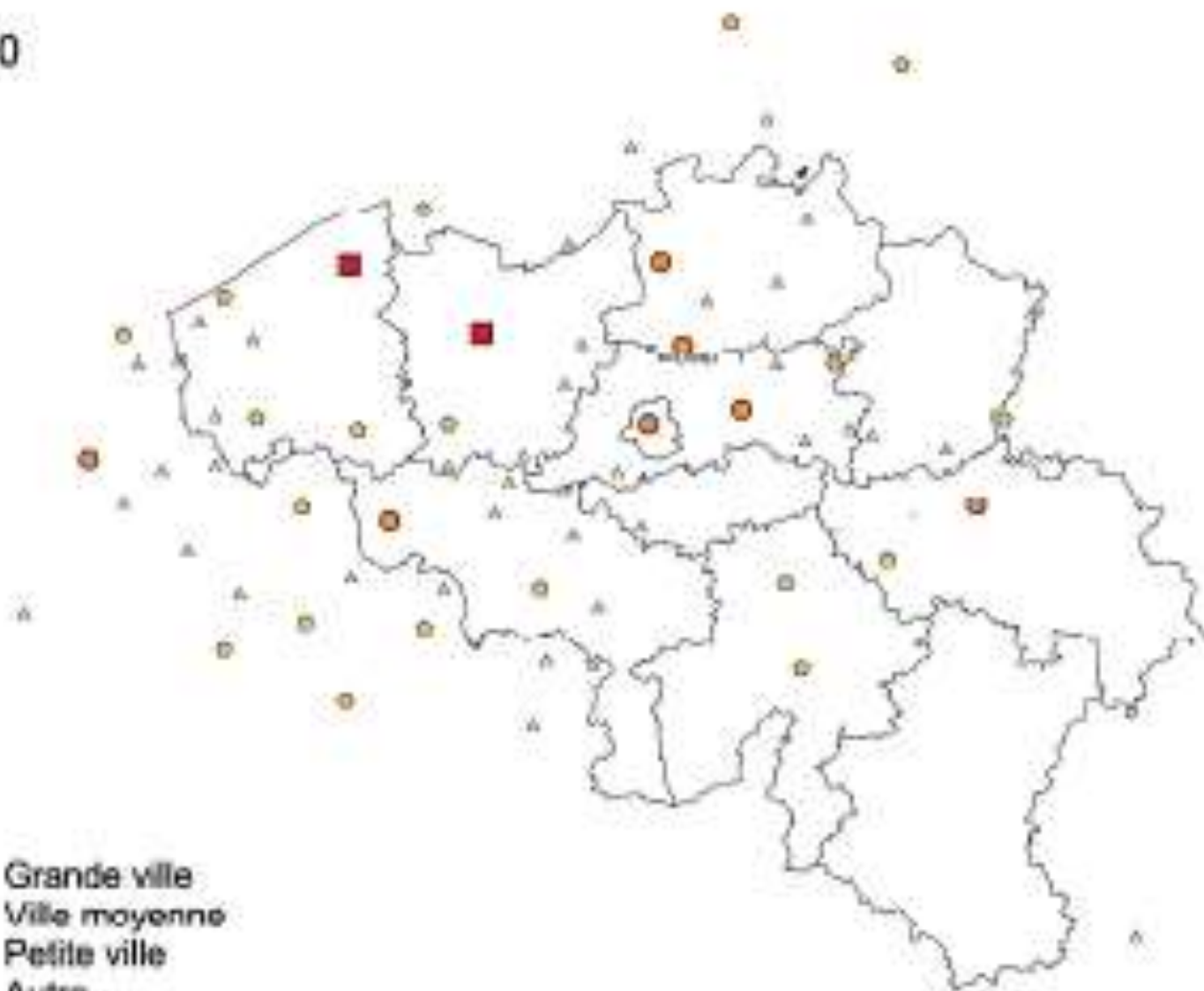
C= commodity M= money

exchange of use values: money facilitating exchange

- Radio-concentric structure, walls, concentration by craft/trade, market places

1450

- Grande ville
- Ville moyenne
- Petite ville
- △ Autre



Cities in mercantilist Europe

Cities as centres of long distance trade

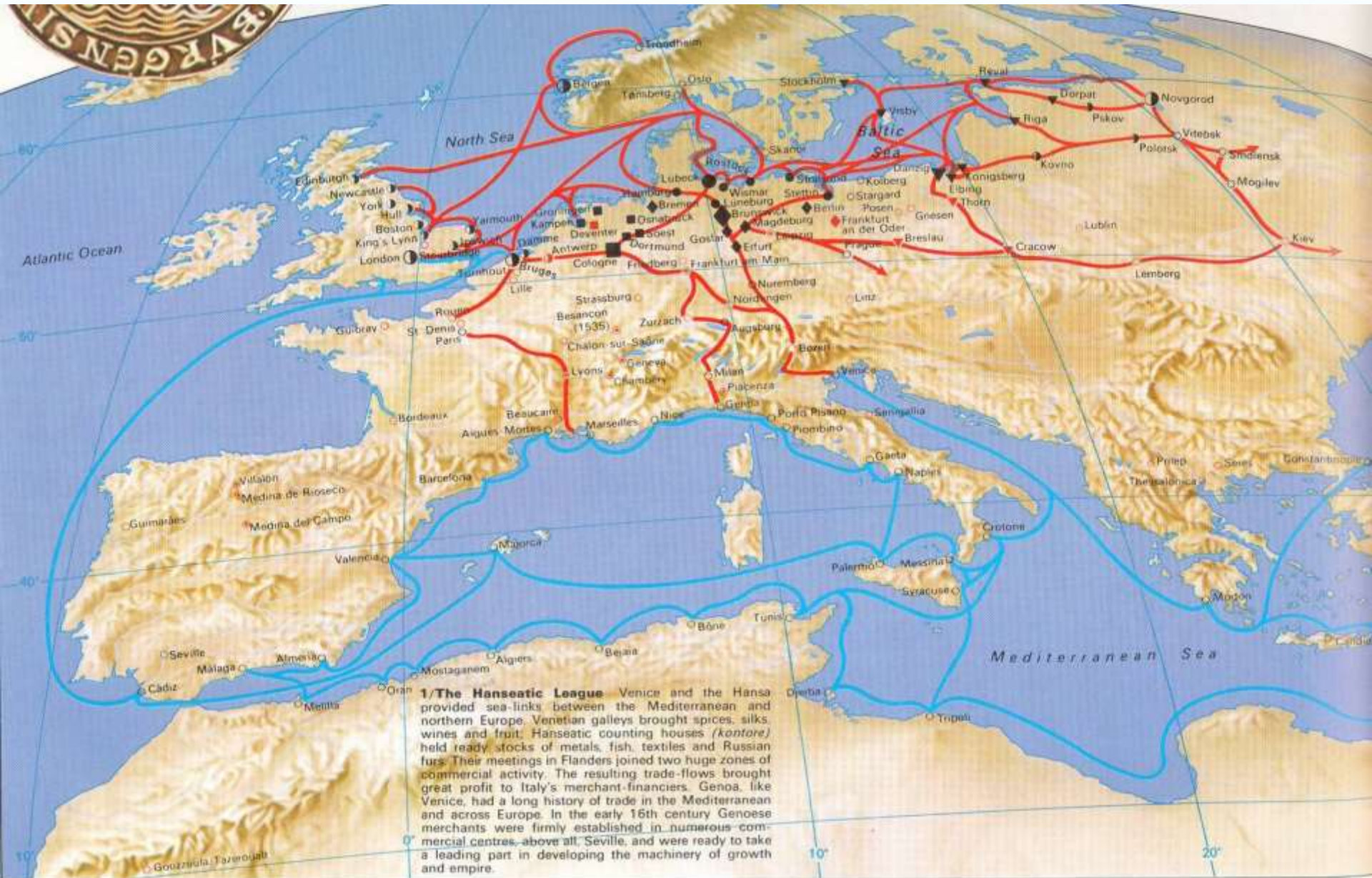
- Commercial capital: buy where it is cheap; sell where it is expensive

$M - C - C' - M^+$

exchange for money (exchange values)
money as object of accumulation by trade

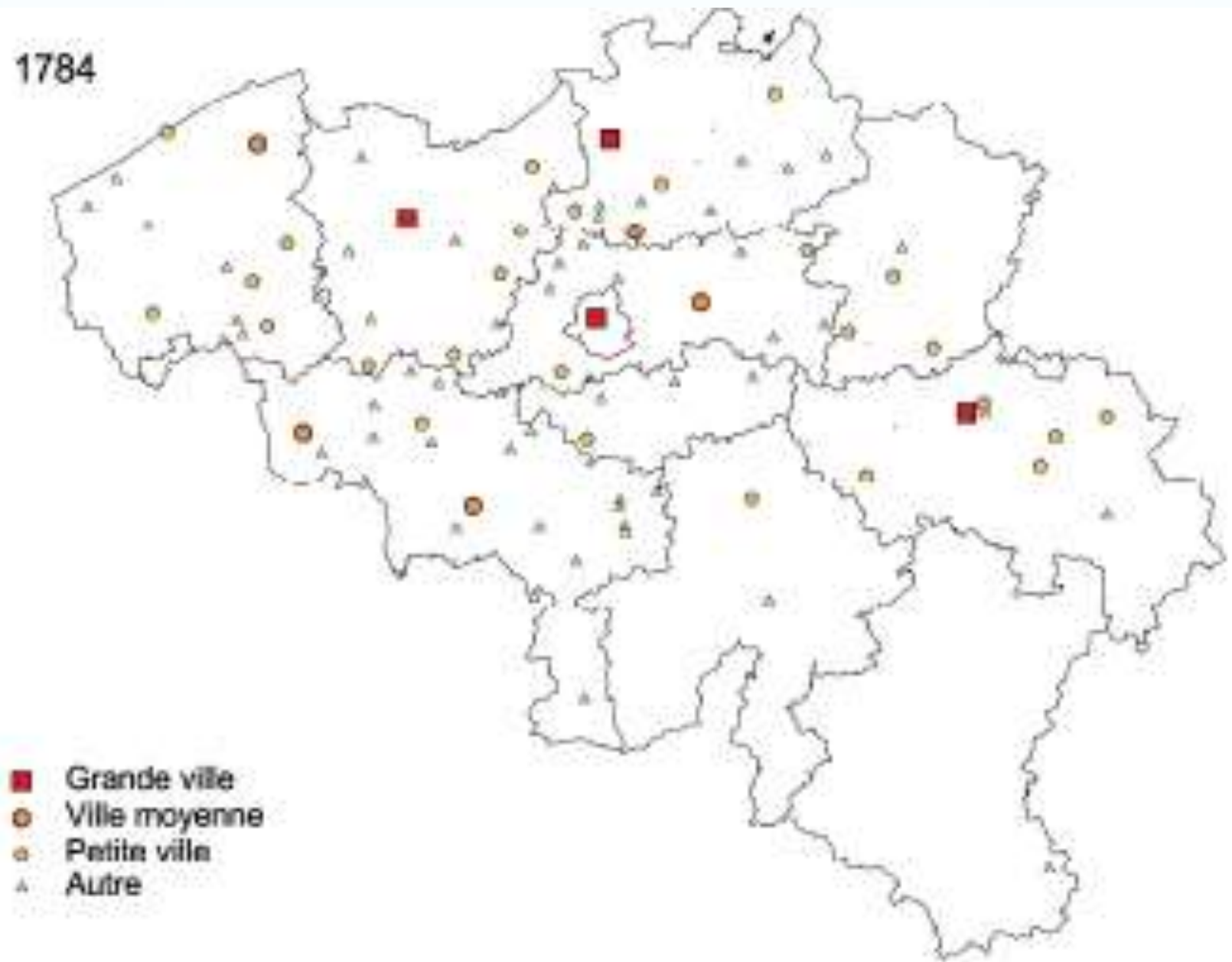
- Specialisation and monopoly rent seeking - colonialism
- Control and support by feudal power
- Waterways, harbours, warehouses

The Hanseatic League, c.1500



1/The Hanseatic League Venice and the Hansa provided sea-links between the Mediterranean and northern Europe. Venetian galleys brought spices, silks, wines and fruit. Hanseatic counting houses (*kontore*) held ready stocks of metals, fish, textiles and Russian furs. Their meetings in Flanders joined two huge zones of commercial activity. The resulting trade-flows brought great profit to Italy's merchant-financiers. Genoa, like Venice, had a long history of trade in the Mediterranean and across Europe. In the early 16th century Genoese merchants were firmly established in numerous commercial centres, above all, Seville, and were ready to take a leading part in developing the machinery of growth and empire.

1784



Industrial revolution

Cities as concentrations of industrial production

- Industrial capital: buy labour power to make profit

$$M - C - P - C' - M^+$$

C = raw material + means of production + labour capacity

P = production

C' = end product

exchange value C' > exchange value C

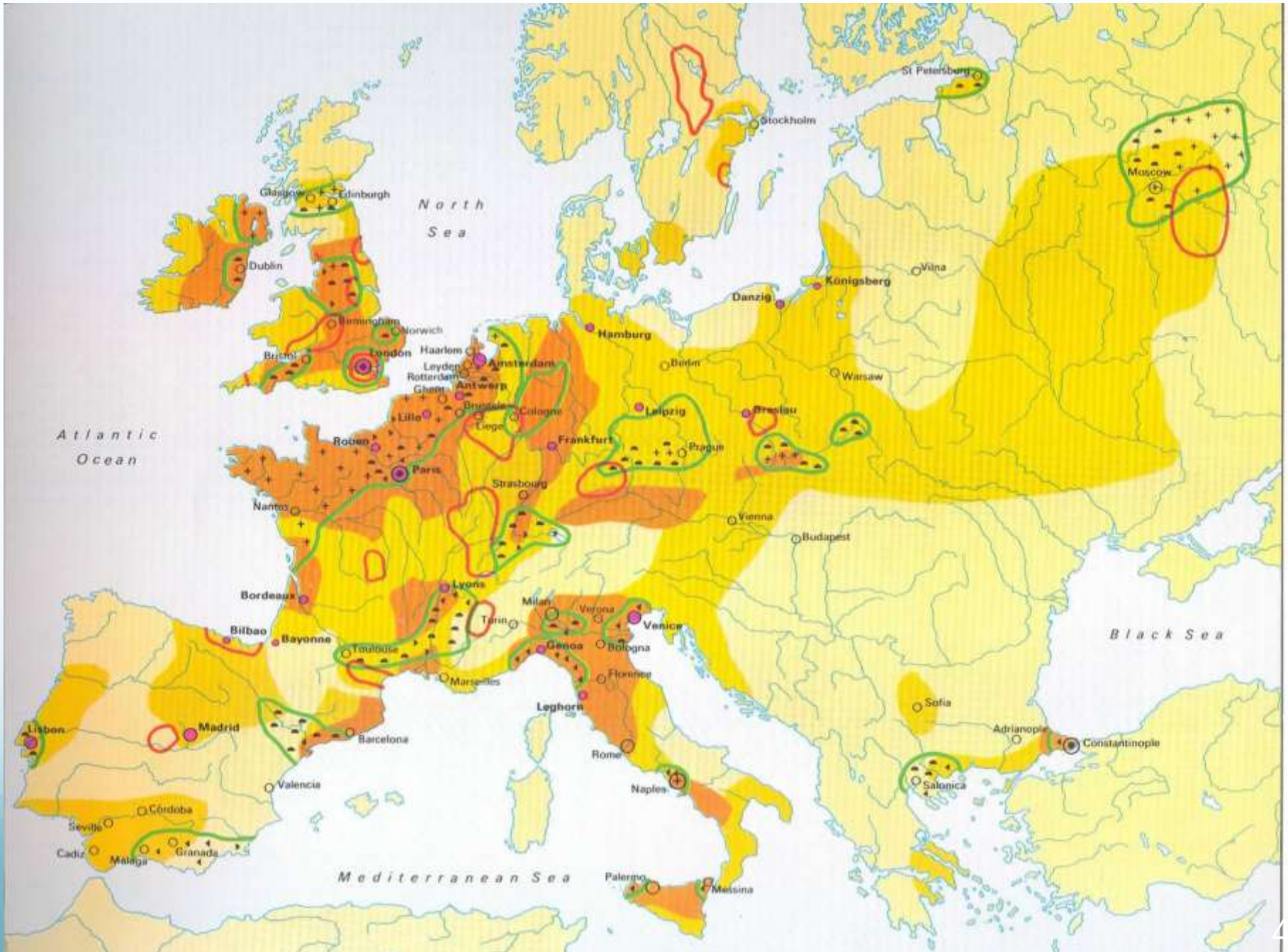
added value by labour capacity > cost of labour capacity

money as object of accumulation by production

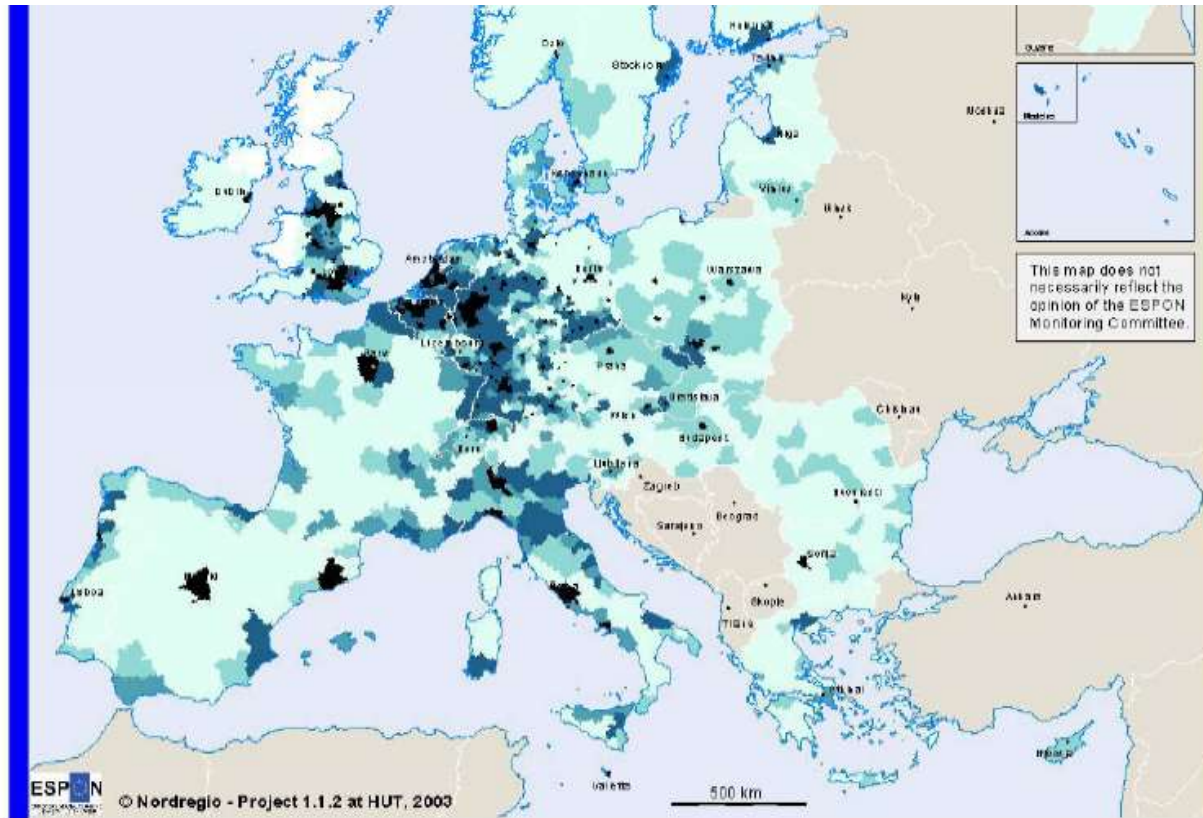
- Mercantilism as precursor (modern state formation and colonial trade)
- Urban explosion, railways, factories

[Socialist cities: from market to plan;
from consumption to production]

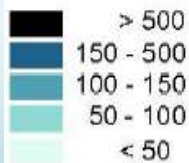
Trade and industry in the 18th century



The European blue banana: main trajectory of the industrial revolution



Urban inhabitants/km²



White box: No data

Due to data being based on national classifications, figures between countries are not comparable.

Geographical Base: Eurostat GIS

Origin of data: National Statistical Office

Source: Nordreg

Map 3.1. Urban population density based on national classifications.

Cities in the global age

Cities as rent capturing machines

- Hypermobility capital, flexible accumulation and geographical (urban) competition
- Financialisation: buy money to make more money

$$M - M' - M^+$$

money as object of accumulation through financial markets (financial capital)

- Restructuring cities to make them attractive for international investment
- Airports, offices, ICT, landmarks

The future of the Wetstraat in Brussels

<https://www.christiandeportzamparc.com/fr/projects/la-rue-de-la-loi/>



A spectacular (male) form of geographical competition

