

Research Question

The importance of river transport which is so called only of subsidiary a transport means.

- (1) Can it be true that main shipping declined after WWI?
- (2) How did it affect industrialization in Frankfurt after 1914?
- (3) What kind of relation does shipping have to railway?

Recently studies say..

- (1) Main shipping developed remarkably in completion of West harbour. **But the shipping declined after WWI.**
- (2) East harbour is necessary for sustainment of commerce and industry.
- (3) Frankfurt was **industrialized through incorporation.**



- They say that the shipping declined after WWI, but no studies show a development of Frankfurt's harbour after 1914.
- There is no comparative study of ships and railways.

History of Main Shipping

- 1860's: Because of non maintenance, Main shipping declined.
- 1886: West harbour and Main canal began operations.
  - ..Growing quantity of transported by shipping, cries for a new harbour became louder.
- 1912: East harbour ran.
  - ..**East harbour area** consists of harbour, Industrial zone and residential district.

During World War I

\* Main Shipping (see Figure 1)

- **Arrival goods:** the principal freight is coal.
  - ..The volume of coal is steady from 1913 to 1919.
- **Shipment goods:** A scale curtailed.

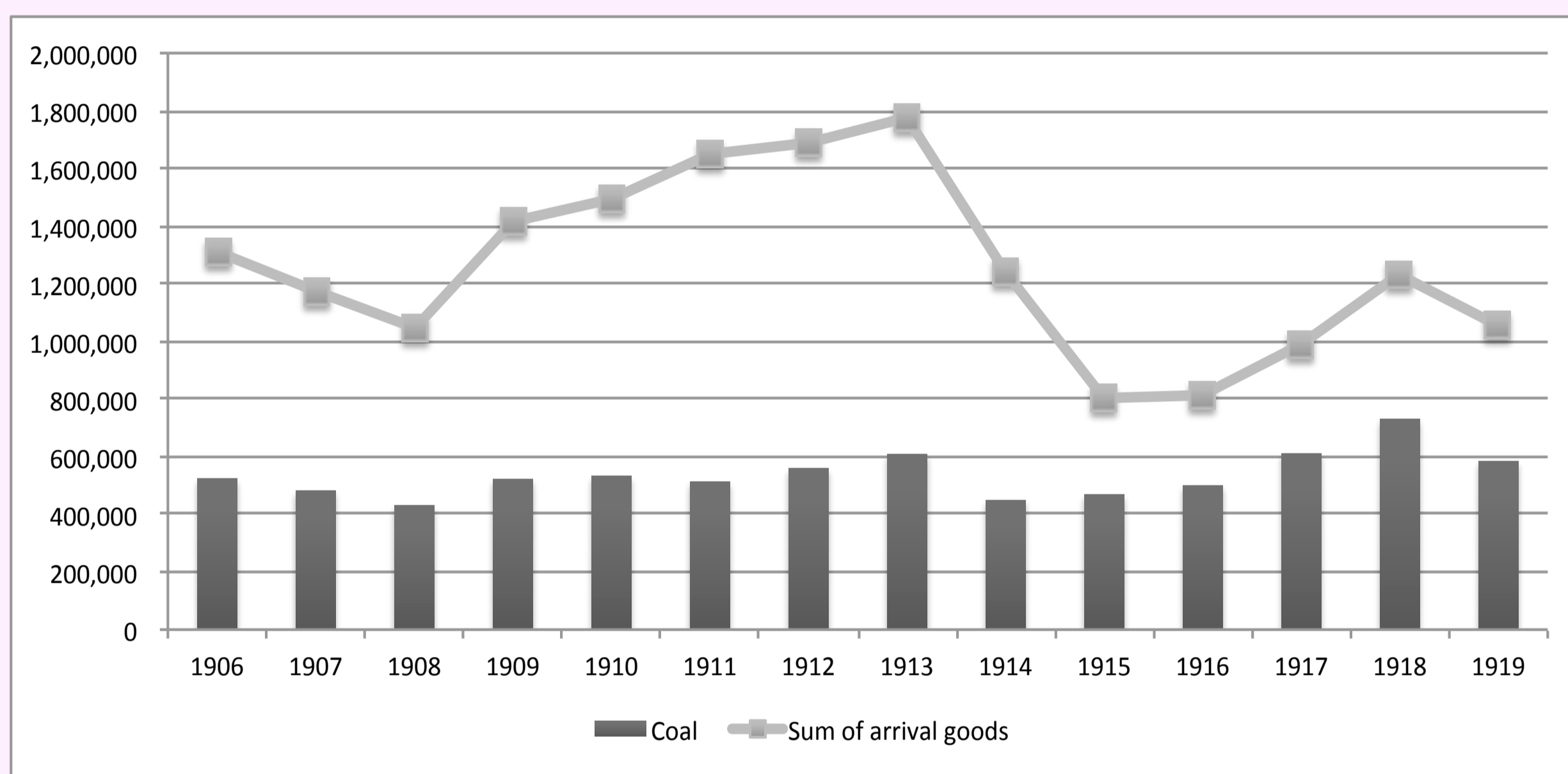
⇒ On breaking up war, **river transport changed.**

\* East harbour area

- Frankfurt was **not negligent** despite a war regime in the **maintenance of East harbour.**
- Additional expanded land was **allotted to war economic corporations and associations.**

⇒ The land demand declined on war regime, so Frankfurt made an effort to invite factories and companies.

Figure 1. Quantity of Arrival goods by Shipping (unit: t)



After World War I

\* Mass transport

In Main shipping (See Figure 2) ..

- Arrival goods: returned gradually the prewar level, main goods is coal.
- Shipment goods: remarkably declining after 1925.

and..

- Coal is important goods for shipping and railway.

⇒ On shipment goods, railways established superiority.

a) It is custom that coal was transported by shipping, so they are **not competitive relationship.**

b) a role of **shipping** is **import of raw material**, on the other hand the role of **railway** is **export of Frankfurt's products.**

Figure 2. The volume of Main Shipping (unit: t)

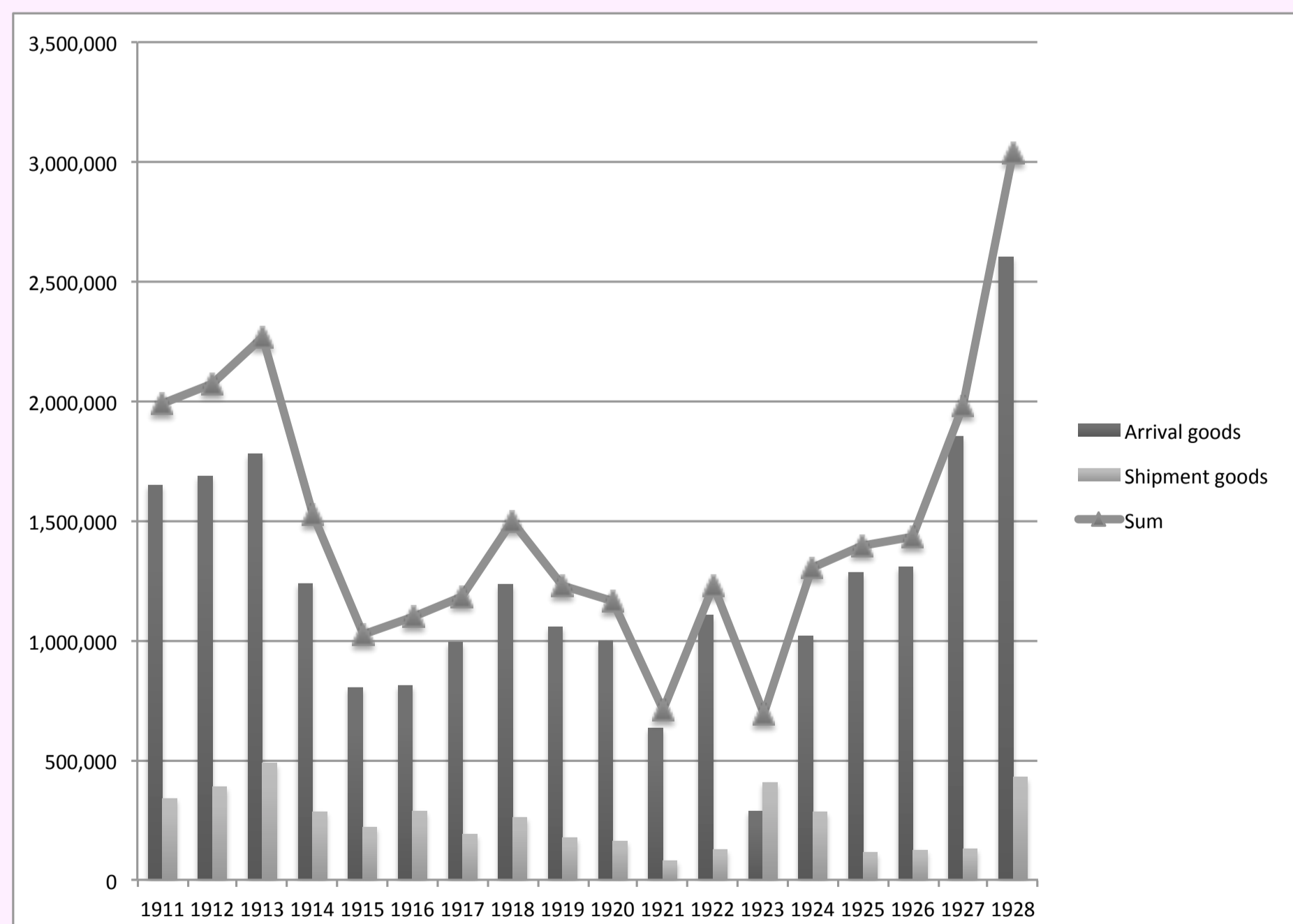


Table 1. The details of Frankfurt's factories (make extracts from a list of all industry.)

Kind of industry	1911		1914		1925	
	Factory	Employee	Factory	Employee	Factory	Employee
The Metalworking	159	4,281	188	9,536	242	5,456
The Machine	193	15,734	219	12,982	425	28,898
The Chemical	21	891	8	405	36	1,227
The Fibre	15	443	20	493	35	909
The Leather	45	1,930	42	1,494	103	2,873
The Bread and Cake	147	1,004	226	1,028	340	1,375
The Construction	93	2,540	88	1,847	115	4,202
Summe of all industry	2,216	50,577	2,235	49,046	3,102	76,556

\* East harbour area

- Frankfurt's authorities continued to expand Harbour area
  - ..aimed directly and indirectly a large income.
- There were **173 diversity companies** in Aug. 1919.
  - ..especially metalworking, food, building and chemical factories.
- There were **128 trading companies** in 1928.

\* Frankfurt's industry (see Table 1)

- Mar. 1925: the development of industry promotion.
  - a) Support of finance, technique and infrastructure
  - b) Expand industrial area
- Increased metalwork, machine, chemical and leather industry.
  - ..**The precision machinery industry** is related to each industry. e.g. Grinder, Air compressor, Leather processing machine

Conclusion

- On breaking up war, river transport **changed in the contents of transport goods.**
- Frankfurt was **not negligent** despite a war regime in the **maintenance of East harbour.**

⇒ It can not be true that river transport failed on after WWI.

- **The role of shipping and railway is different.**
- **Coal and building material** that are important for industry is conveyed by shipping.

⇒ Main shipping contributed to spreading Frankfurt's industry.