The relation between port competition and hinterland connections

The case of the ‘Iron Rhine’ and the ‘Betuweline’

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• The strength of a maritime logistics chain depends on its weakest link
• What about the hinterland transport link?
• Two new hinterland railway projects as a case
• Critical issues in port competition
• Relationship between port competition and hinterland transport
• A case: Iron Rhine (Antwerp) and Betuweline (Rotterdam)
• Conclusion
CRITICAL ISSUES ON PORT COMPETITION

- Trends in the maritime logistics chain
- Shipping companies
- Land-side developments
- Port authorities
TRENDS IN THE MARITIME LOGISTICS CHAIN

- Global ports as engines of economic growth
- Embedded in a highly competitive environment
- International trade has expanded enormously
- Worldwide redistribution of the use of labour and capital
- Integration + globalisation of markets
- Strategic partnerships: shipping companies, terminal operators and port authorities

=> Effect on trade and the use of ports
TRENDS IN THE MARITIME LOGISTICS CHAIN (ctd)

- Will economic growth persist?
- And if it does, will it continue to translate into greater demand for maritime transport?
- Or will economic growth manifest itself in services rather than in industrial output?
- Will scale increases on the basis of horizontal and vertical integration also continue?
- What are the likely consequences of the deployment of ever-larger vessels?
TRENDS IN THE MARITIME LOGISTICS CHAIN (ctd)

• What kind of timeframe may shipping companies be looking at in their search for new partnerships?
• And which strategies may the other market players deploy in response?
• Will shipping companies become the dominant players and thus be able to impose their will upon other parties, including port authorities and terminal operators?
SHIPPING COMPANIES: RATIONALISATION, MERGERS AND SCALE INCREASES

- Deploying additional capacity at a lower operational cost per slot
- A mixed fleet as a means of spreading risks
- Additional cost control through mergers and takeovers, and capacity reduction
- Strategic alliances, new partnerships, rerouting of vessels
SHIPPING COMPANIES (ctd)

- Potential result: changes in direct port calls, with significant implications for hinterland transport projects.
- Issue of concern: where will the increase in container vessel size stop? (cf. negotiation power in talks with port authorities, trade-off with terminal costs and hinterland transport costs,....)
Crucial issue:

The economic benefits shipping companies seek through far-reaching scale increases and the corresponding cost reduction should not be wasted through time and cost bottlenecks on the quay, in the terminal or during hinterland transport.
LAND-SIDE DEVELOPMENTS (ctd)

- European ports: will further expansion lead to overcapacity?
- Terminal operators: concentration movement as a buffer against vertical integration
- However, potential threat to shipping companies, as reduced competition may lead to lower productivity growth, longer vessel-handling times and higher rates
- Potential response: dedicated terminals
PORT AUTHORITIES IN A NEW ROLE

- The market power of port authorities is decreasing
- One remaining strong trump card: the power to grant concessions and to determine the duration
THE RELATIONSHIP BETWEEN PORT COMPETITION AND HINTERLAND TRANSPORT

- Substantial maritime growth, but the competitive balance between ports may result in relative shifts in freight flows (cf. improved hinterland transport services)

- No increasing profit margins: shipowner will pressurise other links in the logistics chain (e.g. hinterland modes)
THE RELATIONSHIP BETWEEN PORT COMPETITION AND HINTERLAND TRANSPORT (ctd)

- **Overcapacity**, followed by rationalisation, can/will result in changes in ports of call, loops and frequency of services

- **Additional pressure on other market players**: hinterland transport operators as a potential target for vertical integration
SHIPPING COMPANIES’ BEHAVIOUR

• Aversion to any potential time loss
• They will opt first and foremost for seaports and terminals that are free of bottlenecks
• Hence the importance of having enough free and directly available capacity
Hinterland transport is largely dependent upon the strategic decisions and the success of other market players, but it can also contribute to the success of specific maritime logistics chains.
A CASE: IRON RHINE AND BETUWELINE

- Within Hamburg-Le Havre range
- Two railway links to the German hinterland
- Illustration of port competition on the battlefield of hinterland transportation
  - Offering additional capacity
  - Lower costs with impact on modal split
IRON RHINE AND PORT OF ANTWERP

- Rail transport in and around the port close to maximum capacity
- Iron Rhine is one of three crucial railway projects for the port
- Capacity: between 9.4 and 12.3 million tons (2020)
- Without the Iron Rhine, there is a danger that the port of Antwerp will reach its rail freight limits towards the hinterland
BETUWE LINE AND PORT OF ROTTERDAM

- Capacity problems on the railway infrastructure
- Transnational priority project in EU
- Annual capacity: 74 million tons
- Strategy: ‘try to be the first’
PUTTING BOTH RAIL PROJECTS TOGETHER

- Both railways provide additional rail capacity to and from Germany
- Important signal to the users of ports
- New lines free capacity on other routes
- Link to new European Union member states
- Crucial (new) links in the port competition game, within and outside the H-LH-range
CONCLUSION

- Free capacity is the key to success: in maritime throughput, in hinterland transportation services, and their combination
  - To attract new cargo flows and to retain current flows, because shipping companies opt for ports with no congestion and no bottlenecks
  - New hinterland projects must therefore be regarded in the broader context of (control over) the total maritime logistics chain