maritime networks, port and hinterland

future challenges

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“Lines of fracture, inversions, splits, rifts: there is, as it were a line beyond which, for every expanding system – every system which, by dint of exponential growth, passes beyond its own end – a catastrophe looms.”

(Baudrillard, 2005: 191)
how is China’s meat consumption related to the future challenges in the maritime and port sector?

Source: USDA Production, Supply and Distribution database and projections.
changes and challenges

what are the repercussions and effects on shipping, ports and hinterland?
network evolution

peripherality

competitiveness

regional challenges and global repercussions

market structure and competition

centrality
star-shaped network structure,
top 100 Liner Shipping Bilateral Connectivity Indices (LSBCI)

Source: Author based on LSBCI data
star-shaped network structure. top 250 LSBCIs

Source: Author based on LSBCI data
evolution of vessel sizes on global main routes, 2000 - 2015

Source: Wilmsmeier, based on CompairData, Lloyds List and Marine Traffic various years
evolution of vessel sizes on global secondary routes, 2000 -2015

Source: Wilmsmeier, based on CompairData, Lloyds List and Marine Traffic various years
what is the effect on infrastructure and hinterland?

Tonnage: 197,362 DWT
Length: 395.4 m (1,297 ft)
Beam: 59 m (194 ft)
Capacity: 19,224 TEU
port hinterland impacts

for comparison:
Suez Canal: 164 km
Panama Canal: 77 km
Golden Gate Bridge: 2.7 km (53x)
Port development

Rail infrastructure

Road infrastructure

Logistics strategies

Competitiveness

Port-hinterland integration
emerging issues to face future challenges

- integration in logistics chains
- strategies of market players
- sustainable and systemic vision of maritime, port and hinterland development
- proactive and integrated policies and regulatory frameworks
logistics strategy and planning

• infrastructure, transport and logistics, are mutually dependent and therefore produce complex issues require holistic analysis and integrated solutions.
• globalized and competitive markets, require continued improvements in the quality of the products and price, hence the importance of logistics planning.
• logistics strategies and planning in particular, often is still absent from public policy
• most countries still develop transport policies focus in one mode and not in terms of the overall competitiveness, efficiency and applying sustainability criteria
• very few countries monitor their progress and advances in logistics performance
main challenges

• to align the conception, design, implementation and monitoring of policies related to infrastructure and services to maximize their impact on development, requiring the review of its policies for infrastructure services

• to improve the policies related to infrastructure and logistics services to maximize their impact on development

• to integrate sustainability principles in current an future policies and strategies
... many issues are about awareness, knowledge sharing, collaboration and cooperation.

the need to understand the “why’s” and “how’s” to make the right policy decisions and to shape the future of freight and logistics strategies.
questions?

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