

Mid-term forecasting of demand for barge traffic

From trade forecasts to transport demand

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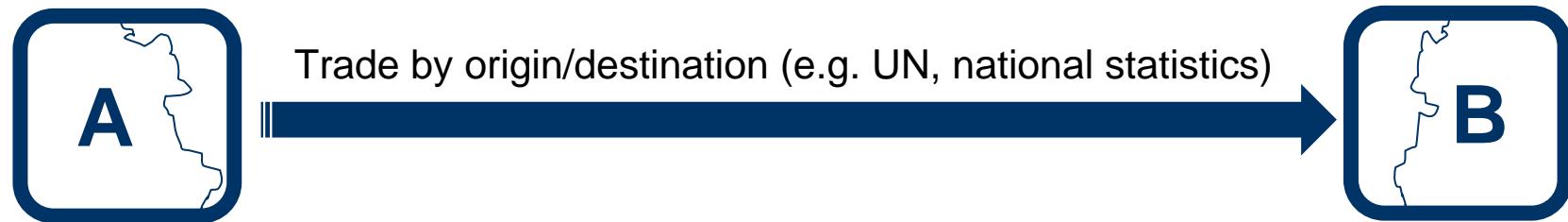
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- 1. Analysis of status quo**
2. Trade forecast by countries and industries
3. Regional forecasts
4. Implications for modal split

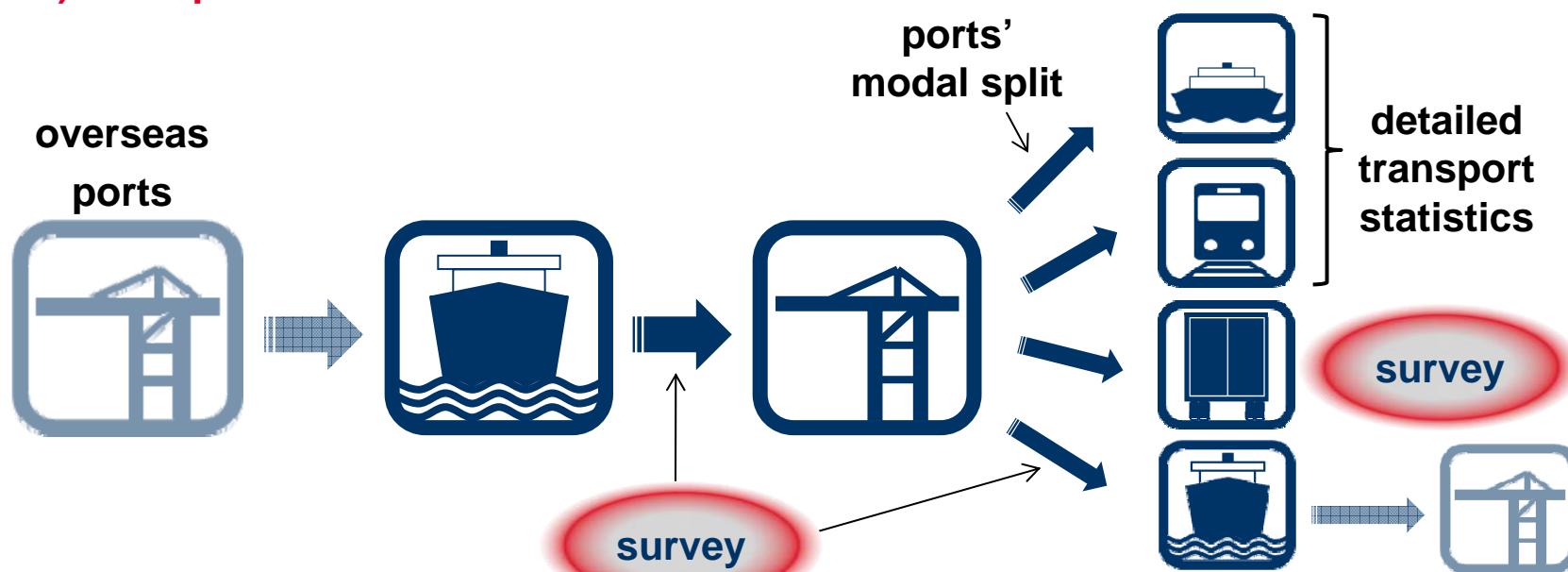
1. Analysis of status quo

Linking trade and transport statistics

A) Trade statistics



B) Transport statistics



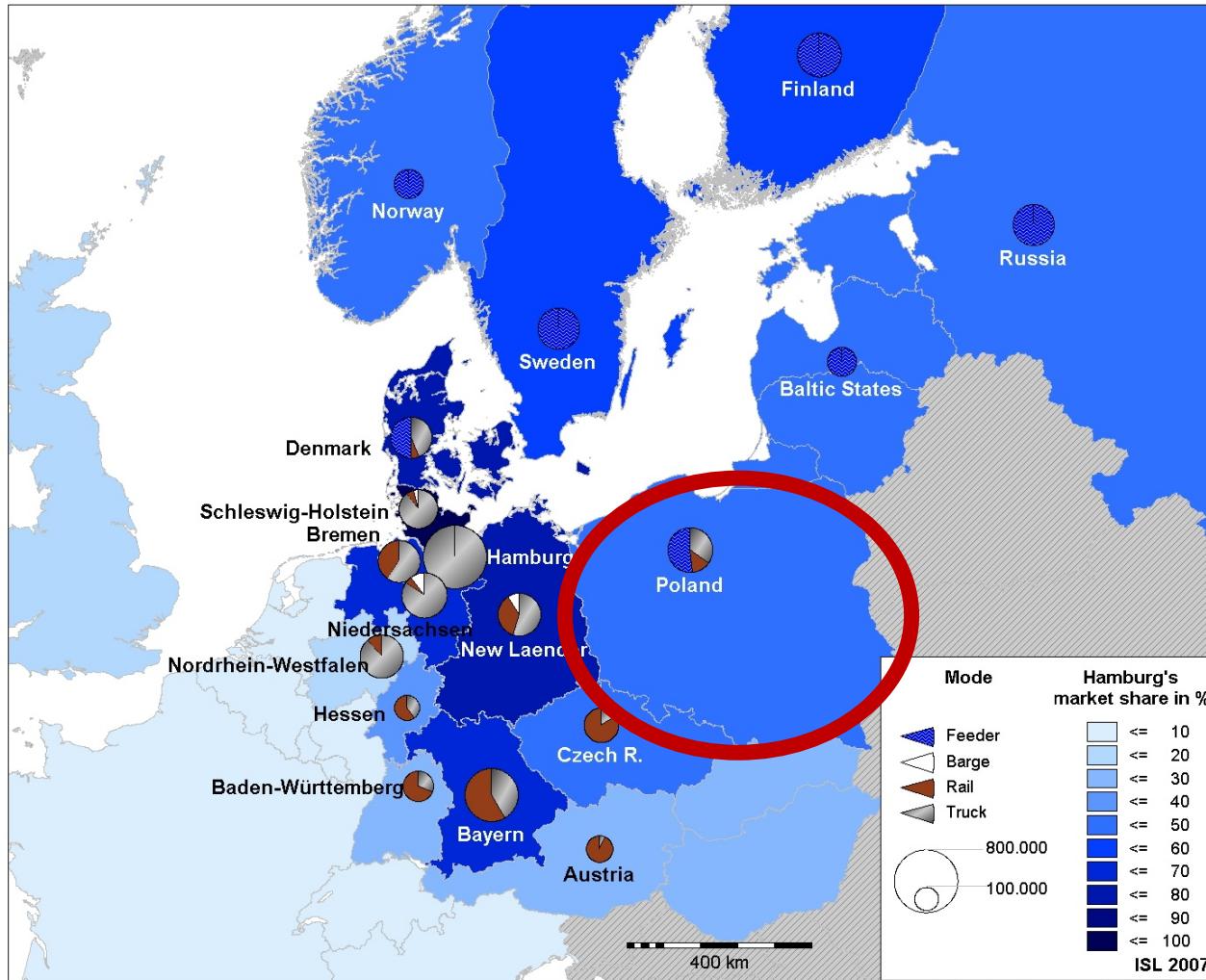
1. Analysis of status quo

Modal split and hinterland distribution

- **Modal split statistics from the ports:**
 - distribution of hinterland traffic by modes
 - for some ports: modal split by hinterland regions
- **Transport statistics:**
 - distribution of hinterland traffic by regions for barge and rail
 - truck traffic: not available or only available for transport companies registered in the respective country
- **Surveys:**
 - share of transhipment by corresponding ports/regions
 - distribution of hinterland traffic by regions for truck
 - modal splits per region
 - expert interviews / plausibility checks

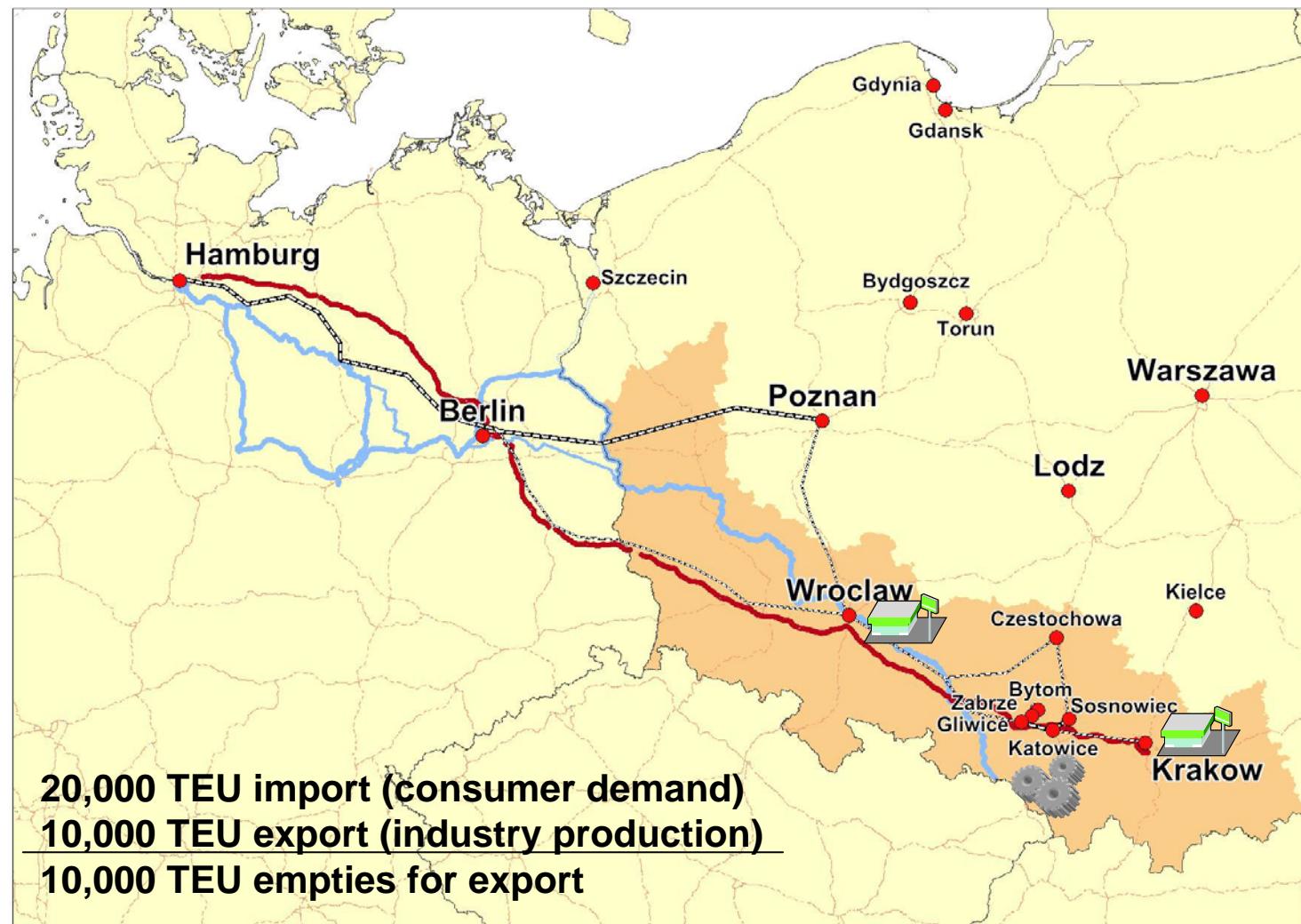
1. Analysis of status quo

Market shares by hinterland regions and modal split (container)



1. Analysis of status quo

Southern Poland 2009



1. Analysis of status quo
2. **Trade forecast by industries and countries**
3. Regional forecasts
4. Implications for modal split

2. Trade forecast by countries and industries



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1. Forecasts of general economic indicators by country
2. Industry forecasts
3. Expertise from country or regional experts and industry sources
4. Feedback from customers using the service



forecast of trade matrices for commodity groups:

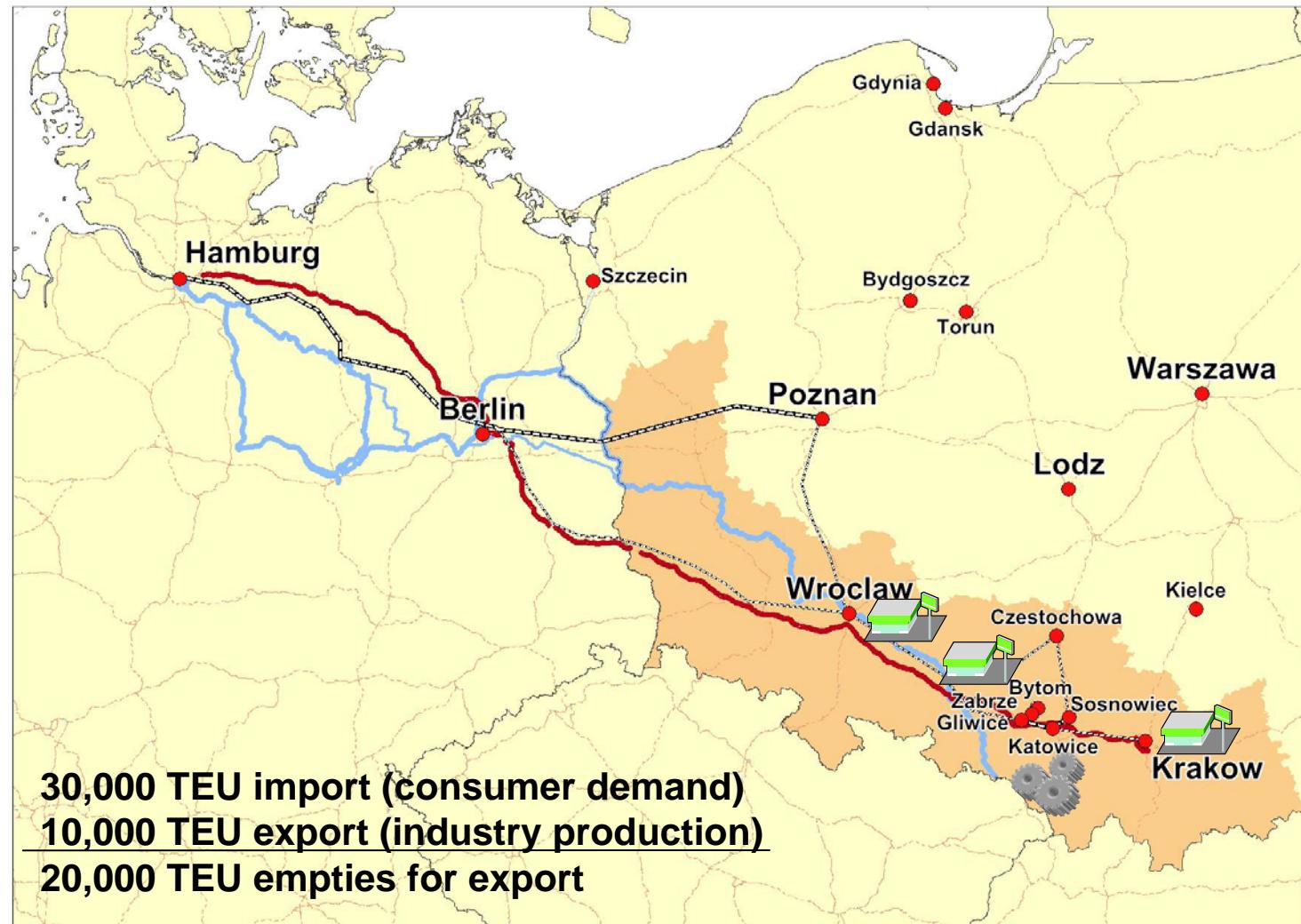
countries of origin x countries of destination x commodity groups

Content

1. Analysis of status quo
2. Forecast by industries and countries
3. **Regional forecasts and structural effects**
4. Implications for modal split

3. Regional forecasts and structural effects

Southern Poland mid-term outlook (consumption and sector forecasts)



3. Regional forecasts and structural effects

Structural implications and regional trends

- **Regional economic structures determine trade outlook**
- **Changing trade balances have a direct impact on empty container transports**
- **Major regional players' development may deviate from trend**
 - closing down of existing sites or construction of new ones
 - gains/losses of market shares

4. Implications for modal split

Structural implications and regional trends

Changes in the modal shift difficult to predict:

- **basic assumption:**
constant modal shares per region/industry and for empty containers
- **endogenous modal shift through changing shares of sectors**
- **capacity limitations for certain routes may lead to modal shifts**
(however, capacity estimates have a number of caveats)
- **changing strategies of logistics service providers or port operators:**
not captured by models, qualitative data and interviews necessary

Conclusions

- trade forecasts at sector level together with economic structures are a rich source for forecasting transport demand
- some structural changes can be forecast, highlighting changes in transport demand
- strategic decisions of importers, exporters, and transport companies can at best be assessed in interviews
- the higher the level of regional detail, the more important to “know the players involved”

Thank you for your attention!

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