Port regulation in Europe: including dynamic elements within the terminal concession agreements

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Agenda

- Introduction
- Background
- Common structure
- Potential problems
- Proposed solutions

Background

- The European SeaPorts Organisation (ESPO), starting from 2008, has highlighted discrepancies in several EU national port systems in respect to:
  - Regulatory powers
  - Competition
  - Investments
- Most of these elements are connected to a more effective concession regime aiming at:
  - Improving the awarding process
  - Including incentives/penalties
  - Linking the concession fee to performance(?), investments and duration
  - Improving the management of the end of the contract
- After several failed attempts, in 2017 EU approved the Regulation 2017/352 (entering into force in 2019) on port services and rules for ports that will foster the harmonization of different national port systems, at least for some port related activities
  - There is still a lack of policies for improving the valorisation of port assets

Background

- Pallis et al. (2010) highlighted main criticalities within the EU awarding process with several discrepancies between industry and public policies' needs
  - For instance: EU commission proposed a 8/12/30 scheme for the concession duration while Port Authorities and operators were in favour of a 10/15/45 scheme, depending on the investments needed
- Theys et al. (2010) underlined the shortcomings that an inefficient awarding process could generate for ports, identifying concession fee and duration as two of the main elements that could help to increase the value of port assets as well as their link to specific performance targets
- Ferrari et al. (2013) introduced a method to link terminal performance to concession fee through a dynamic method, further discussed by Suarez-Aleman and Hernandez (2014) as a way to reduce port inefficiency and Ullah et al. (2016) underline similar issues for every PPP project

The need for policy intervention

- Most of the EU port systems rely on a landlord model in which Port Authorities do not have effective possibility to "influence" terminal operations and traffic but they just have a regulatory, planning, and controlling role
- Concession fees are always calculated statically with annual adjustment due to cost increases (e.g. inflation) but never linked to specific performance targets
- While no specific EU approach is currently taken:
  - Most ports use a simple "asset" value approach with some correction factors

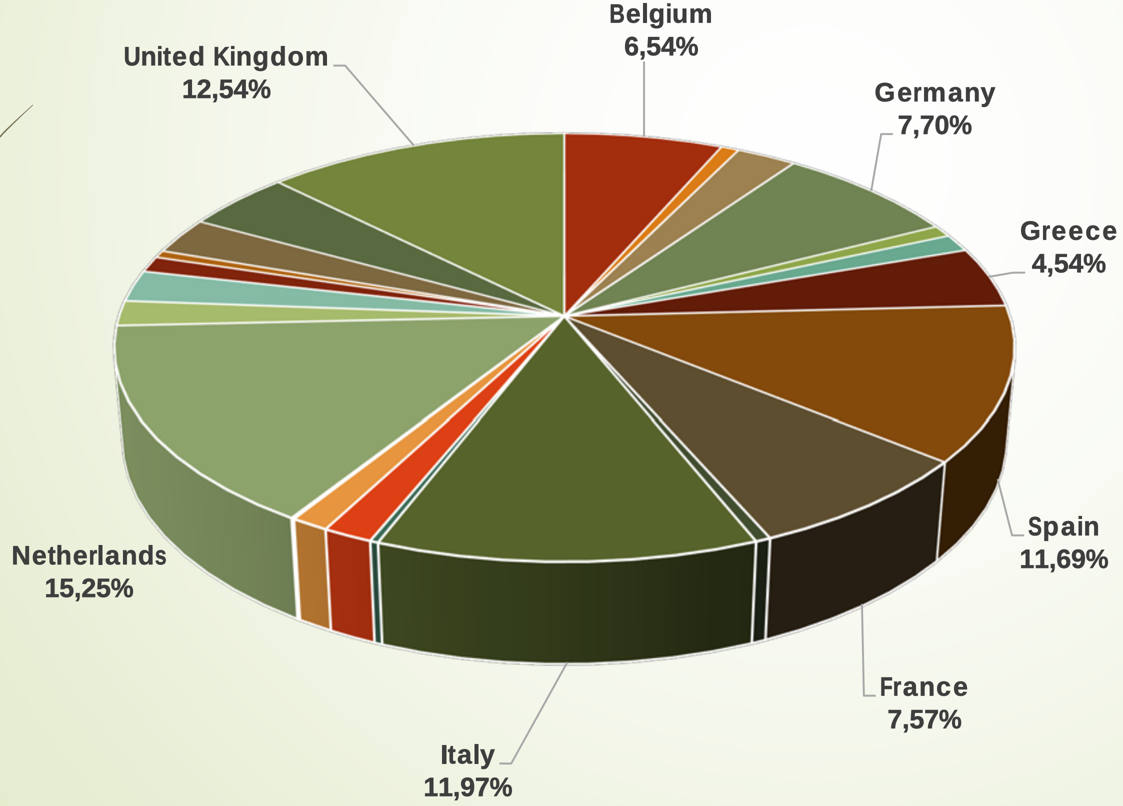
Possibility for under-investigated inefficiencies or modified asset values

The EU port system

- According to Eurostat, in 2016 EU ports handled more than 3 bln tons but with no substantial growth over the past 10 years

Considerations maybe related to:
- Hinterland connections
- effects of the economic crisis
- port management

Traffic distribution



EU country	Δ '06-'16
Belgium	**15.4%**
Bulgaria	**4.3%**
Denmark	-10.9%
Germany	-1.9%
Estonia	-32.8%
Ireland	-4.8%
Greece	**9.8%**
Spain	**8.9%**
France	-16.6%
Croatia	-29.5%
Italy	-11.2%
Cyprus	**33.7%**
Latvia	**7.2%**
Lithuania	**69.8%**
Malta	**5.9%**
Netherlands	**23.4%**
Poland	**37.3%**
Portugal	**36.6%**
Romania	-0.9%
Slovenia	**36.7%**
Finland	-4.2%
Sweden	-5.1%
United Kingdom	-17.1%

Conceptual issues

- In order to introduce a common policy in terms of "concessions", several elements should be considered:
  - Governance characteristics
  - Administrative duties (e.g. investments)
  - Concession structure and organisation
- Moreover, two main issues can generate problems:
  - Often, in EU, similar terms identify different elements (e.g. definition of concession agreement)

    → Thus, a glossary is needed before discussing the problem

  - Sometime, the introduction of a "quantitative methodology" is more difficult to be accepted by the port community (e.g. measures of performance, inclusions in the contracts)

    → Thus, a trade-off should be studied between the need of proper formulations and the possibility to introduce performance schemes

Common descriptions

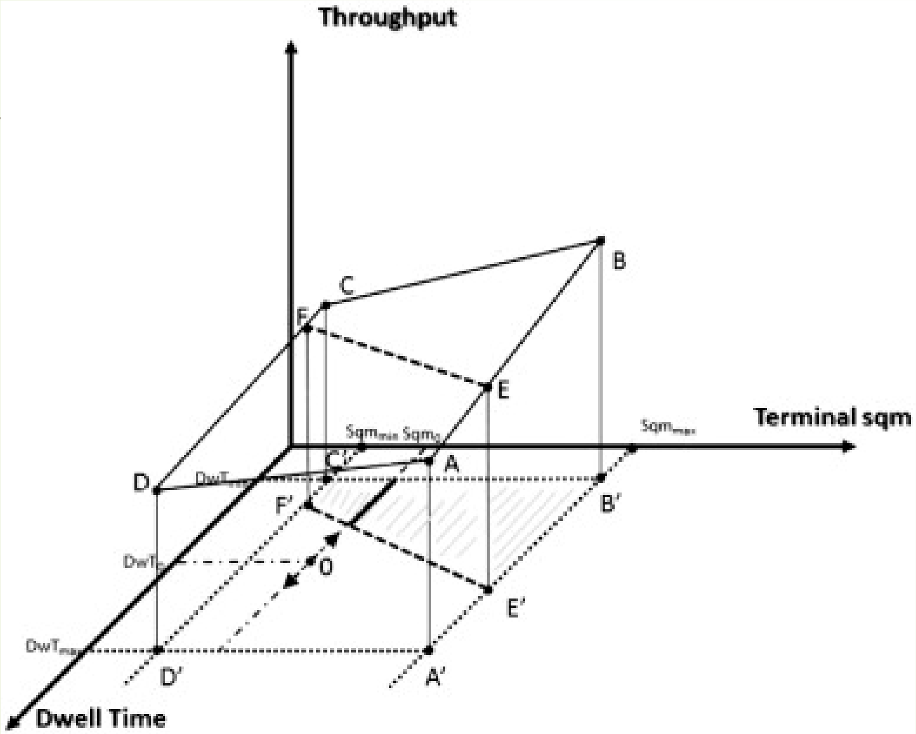
	Governance	Concession	Concession fee	Who is awarding the concession?	Investments	Duration
Belgium	Hanseatic Landlord	Y - lease contract approach	Patrimonial value agreed after the awardign process and with the possibility of applying activity discrimination	Port Authority	Partially public: Government invests in main land infrastructure, port authority is in charged of the mantainance of port areas. Terminal operators should invest in their own concessioned area	EU regulation applied (i.e. 30 years), exemptions are possible. Normally, linked to the overall invested value
France	Latin landlord model	Y - public act that regulates all the elements of the stevedoring operator activity. Difficult to be formally changed	Patrimonial value, normally identified by port regulation with some incentives included for terminal characteristics	Port Authority	Partially public: Government invests in main land infrastructure, port authority is in charged of the mantainance of port areas. Terminal operators should invest in their own concessioned area	EU regulation applied (i.e. 30 years), exemptions are possible
Germany	Federal structure. Main ports adopt Hanseatic Landlord but some specialised private and public ports are also present	Y - depending on state regulation, normally a lease approach	(Patrimonial) value agreed after the awarding process	Port Authority	Partially public: Government invests in main land infrastructure, port authority is in charged of the mantainance of port areas. Terminal operators should invest in their own concessioned area	EU regulation applied (i.e. 30 years), exemptions are possible. Normally, linked to the overall invested value
Greece	Mixed approach: mainly landord but some ports are under a privatization process (e.g. Piraeus , Thessaloniki)	Y*	Normally, patrimonial value but elements are changing due to private companies' investmets	Port Authority	Partially public: Government invests in main land infrastructure, port authority is in charged of the mantainance of port areas. Terminal operators should invest in their own concessioned area	EU regulation applied (i.e. 30 years), exemptions are possible
Italy	Latin landlord model	Y - public act that regulates all the elements of the stevedoring operator activity. Difficult to be formally changed	Patrimonial value, normally identified by port regulation with some incentives included for terminal characteristics	Port Authority	Partially public: Government invests in main land infrastructure, port authority is in charged of the mantainance of port areas. Terminal operators should invest in their own concessioned area	EU regulation applied (i.e. 30 years), exemptions are possible
Spain	Latin landlord model	Y - public act that regulates all the elements of the stevedoring operator activity. Difficult to be formally changed	Patrimonial value, normally identified by port regulation with some incentives included for terminal characteristics	Port Authority	Partially public, through a National Agency for general infrastructure and port mantainance. Terminal operators should invest in their own concessioned area	EU regulation applied (i.e. 30 years), exemptions are possible
The Netherlands	Hanseatic Landlord, Rotterdam has a special recognised status	Y - lease contract approach	Value agreed after the awarding process and depending on State regulation	Port Authority	Partially public: Government invests in main land infrastructure, port authority is in charged of the mantainance of port areas. Terminal operators should invest in their own concessioned area	EU regulation applied (i.e. 30 years), exemptions are possible. Normally, linked to the overall invested value
UK	Mixed approach (i.e. private, trusts, public)	Y* - but in most of the cases is not needed	Private bargaining	/	Private	EU regulation applied (i.e. 30 years) but not normally needed

Critical issues

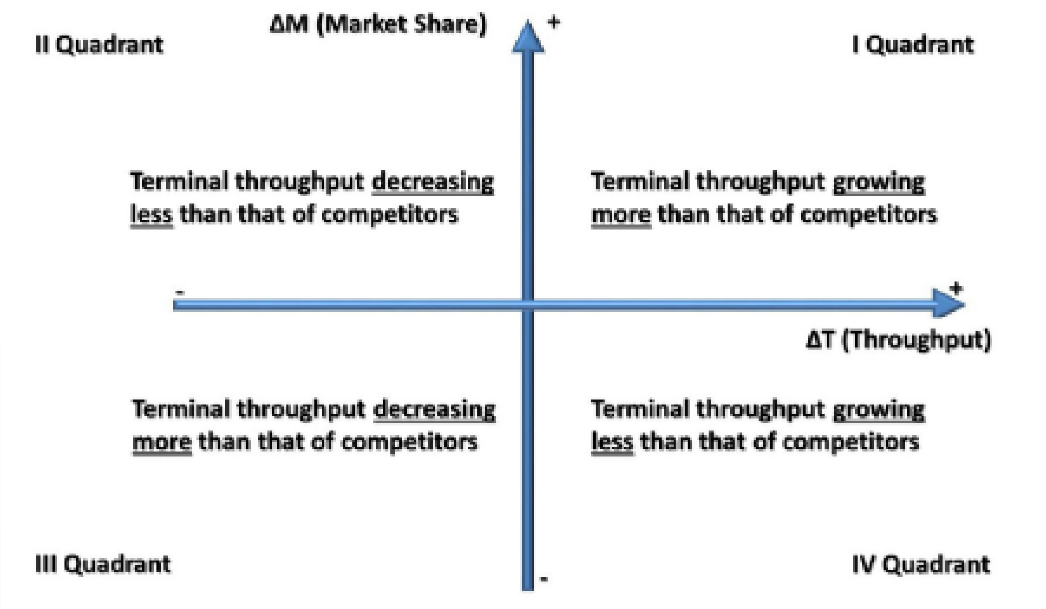
- Concession are a common tools to manage private interventions in ports, nevertheless they often grant a right to operate with
  - Static asset value fee
  - Static Investment patterns
  - Rigid duration
- Often, there is weak link between concession and performance and whenever there is, the link is not dynamic
  - E.g., if the terminal or market characteristics vary, what happens to the concession? Is it amendable?

The connection between the concession and the performance

From a terminal perspective



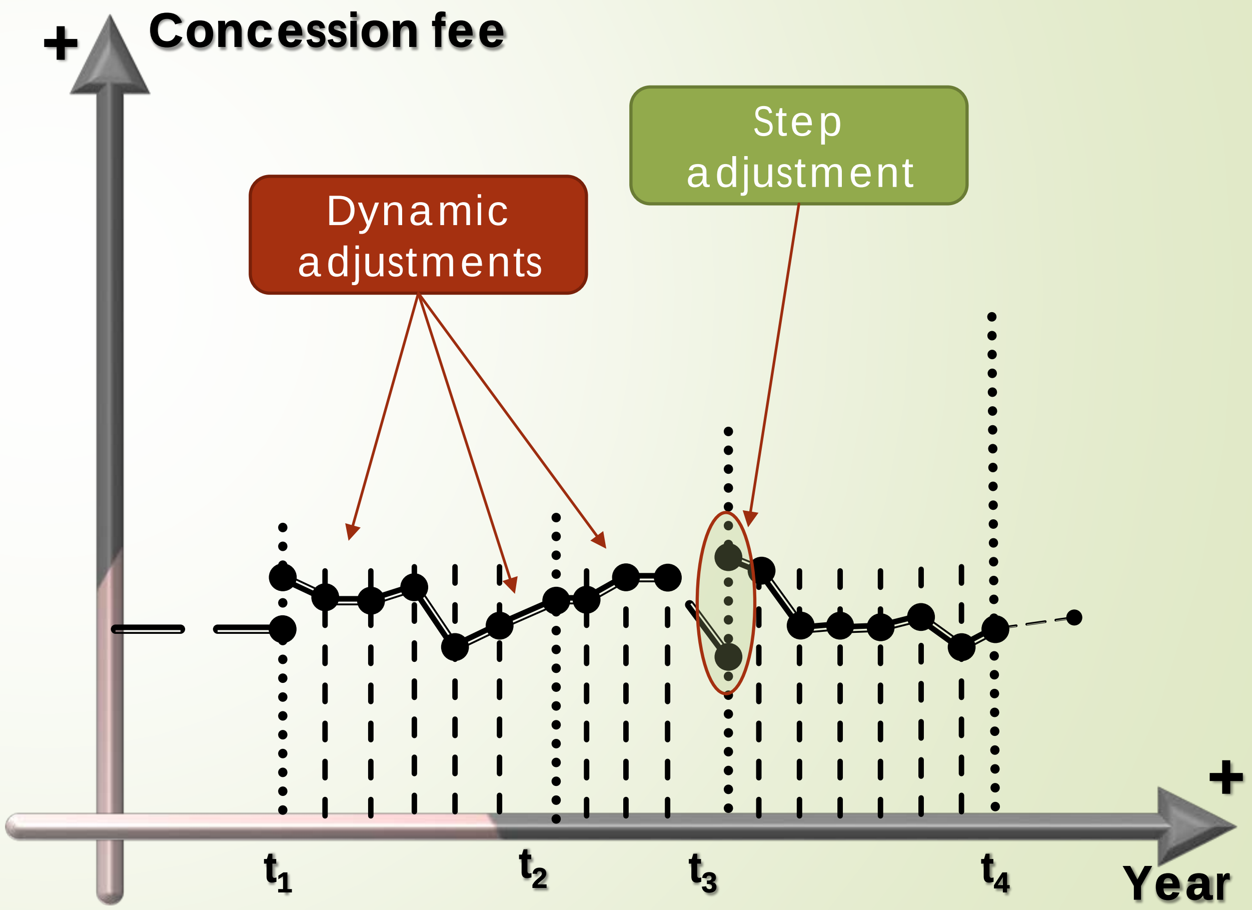
From a general perspective



Dynamic concession fees

- In Ferrari et al. (2018) a dynamic fee has been assessed, finding that:
  - **Both PAs and terminals can benefit from its application**
  - A key element is the discussion of **step variations**
  - It can be adapted to local needs:

$$F_i = f\left(PCM^{u,*}_{i,i-1}, PCT^{u,*}_{i,i-1}\right)$$



Conclusive remarks

- A common policy might increase the port competitiveness for the EU port system, helping in levelling the playing field
- Several EU systems use similar – but not the same – policy tools and this might foster a further harmonization within EU ports
- Considering the concession management process, several critical elements should be better addressed:
  - Awarding process
  - Evaluation of performance
  - Duration and renewal
- The introduction of dynamic system would increase the competitiveness of terminals as well as it would simplify investment patterns and the effects related to duration

Thank you

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