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Legal Structure and Management of Terminals

Focus on Commercial Issues and Privatization

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WORKING PAPER SERIES

Legal Structure and Management of Terminals

Focus on Commercial Issues and Privatization

Orestis Schinas¹

Abstract

Most ports globally remain under public control, yet globalization and international logistic chains exercise pressure towards the dilution of the public control. This text presents briefly the institutional framework of ports and focuses on the operational and financial triggers to dilute public control. Then the key issues related to the market and the society are analyzed. This chapter concludes with a section on the bid process and the primal points discussed, negotiated and agreed in a concession procedure

Keywords: Port Management, Terminal Management, Privatization

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1 Introduction

As it is very difficult and methodologically risky to juxtapose ports and terminals, it is similarly precarious to use the terms 'state-owned facility', 'privatization' and 'national interest' equivalently in all cases of deregulation, seaports and terminal ownership transfer, lease and concession. Most seaports and terminals remain still under State ownership, management or control. Port evolution through privatization (concessions and public listing) or leasing of facilities gains momentum in the last decades. Although fundamentally and financially dissimilar both the concession of a terminal and the sale of terminal have been publicized as privatization; evidently there is no accurate and widely accepted definition of privatization. Moreover, the triggers behind privatizing a terminal differ substantially from case to case, as well as the goals they serve. There are cases, where the injection of private capitals for the development of infrastructure is the goal, while in others, private management is expected to attract new port users and increase the utilization of existing capacity. Undoubtedly, the limits set by the policy makers vary extensively and determine the degrees of freedom of the managerial team to exercise efficient tariff, operational and marketing policies.

It is not possible to outline the conditions in a generic model that should deterministically yield the optimum decision to privatize or not, and if the outcome is to privatize, then at what degree should one proceed, as this is a deeply political issue, strongly influenced by market trends and local circumstances. Therefore the goal of this chapter is a loose exploration of the various forms of ownerships in relation to managerial aspects and critically examines related input from the literature and business cases. Furthermore, the process of privatizing a facility, i.e. the process towards the dilution of exclusive public control, is discussed. For the needs of this work, a port is defined as "a land area with maritime and hinterland access that has developed into a logistics and industrial centre, playing an important role in global industrial and logistics networks" (Notteboom, 2001).

Moreover, one should never forget the dual character of ports: they are nodal points in commercial logistics chains, and therefore they have a marketable value as an asset and at the same time they consist property of the State or serve the interests of the State, fulfilling a set of other non-financial goals as well, such as exercise of the Port State rights and control, enforcement of national tax and customs policy, social cohesion, employment and in many cases also defense and security. Thus making the analysis very interesting and complex, and the relationship of private and public interests intertwined in a unique way in comparison to other transport infrastructure issues.

The structure of the rest of the chapter is arranged as following: a relatively brief analysis of the available recent academic literature and documents widely discussed in the market is provided, revealing also current academic trends and questions raised. The discussion continues with a qualitative approach of the flexibility of the management to decide on critical issues, such as tariff and employment policies, as permitted or prescribed by the institutional framework. In the fourth section, the process of privatizing, or more accurately of diluting absolute state power and control, is discussed, with a focus on the conditions that usually ensure a positive outcome. This chapter concludes with a section on conclusions and the necessary reference on the sources.

2 Literature Review

The scientific field of seaport and terminal ownership falls under the wider topic of infrastructure management and financing. In this field, ideas, experiences and methodologies for charging the use of infrastructure or of transferring the right of exploiting infrastructure is mainly discussed, along with closely linked questions of financing the expansion, congestion pricing and related externalities and social benefits. Focusing the discussion on seaports, Psaraftis (2004, 2005b, and 2007) offers his perspective with a strong focus on European seaports, the Port of Piraeus and the managerial questions raised due to the institutional framework. At the aftermath of the rejection of the "Port Package", a proposal of the European Commission (EC) to the European Parliament (EP), as well as of the implementation of the International Ship and Port Facility Security Code of 2002 (ISPS Code), Psaraftis (2004) was highlighting the necessity for coherent seaport policy instead of the existing 'policy patchwork'. The 'port package' was a proposal of the Commission on the "Market Access to Port Services" (EC, 2001). The intention of the proposal was to encourage the transparency of flows of public and private funding to seaports as well as to regulate competition for the various port services. The fundamental idea was that prospective service provider, whether public or private, will enjoy fair and equal chances in the market, thus healthier competition would lead to more efficient ports, in terms of cost and quality of services, including safety, security and intermodal agility. The expected monumental impact of the 'port package' on the port industry resulted to a trench-line strategy of various interests, in many cases also expressing contradicting goals and scopes, resulted to

a rejection of the proposal through the procedures of the EP. Among other issues the 'port package' was prescribing the following:

- Member States must reveal all national, direct and indirect subsidies for the port sector for all infrastructure and superstructure;
- Member States may authorize port services through transparent and financially rational sets of criteria, such as financial performance, quality of service, employment, environmental issues, etc.;
- The duration of the authorization may vary depending on the accrued or planned investment on infrastructure and superstructure;
- Public port authorities cannot maintain the privileged position of the dual function and role as service providers and port managers;
- At least two port service providers for each category of cargo should be allowed;
- Providers excluded from future services may claim financial compensation;
- Providers may employ personnel of their own choice;
- Self-handling of cargo might be allowed but restricted to seafaring personnel.

At latter stages of the academic discussion, Psaraftis (2005b) supported in his analysis of the EU port policy, the need for a policy reassessment, in terms of coherency, for a proactive and an holistic approach, where stakeholders may express their interest before a top-down policy action. Psaraftis' contribution in the discussion should also include his work (2007b) on public financing and charging, as well his experiences in tariff restructuring at the port of Piraeus (2005a), as it is clearly shown in practice, how the institutional framework affects the set of decision options of the management team.

A notable contribution comes from De Langen and Pallis (2007) focusing their analysis on barriers of entry into the market. Based on a definition provided by Carlton et. al. (1994), where an entry barrier is "anything that prevents an entrepreneur from instantaneously creating a new firm in a market, while a long run barrier to entry is a cost that must be incurred by a new entrant that incumbents do not (or have not had to) bear", they discuss the impact on barriers and of deregulation. Further interesting research is attributed to both researchers. Brooks and Pallis (2008) develop a conceptual framework integrating various relevant performance components evaluating port governance models. Recently, Everett (2008) discussed on the basis of the Australian experience the objectives of reform and problems associated with the deregulation of public sector monopolies, where the particular problem of regulating a former government monopoly, once privatized, transformed into a private sector monopoly. In her work, Everett investigates the impact of regulation on port businesses and on export supply chains. Finally, Vining et al (2008) discuss the potential role of public-private partnerships, a model gaining momentum, and will be discussed also in coming sections.

The analysis is by no means exhaustive and many researchers and contributions are not presented here due to presentation-limitations; nevertheless the analysis of Baird (2000) on the objectives of port privation as well as the book edited by Brooks and Cullinane (2007) on governance and performance, shall be noted and highlighted, as many researchers have cited their work. The work of Notteboom et al (2007) as presented in this book, draws the special attention of researchers in governance of ports. Last but not least, the book of Gómez-Ibáñez and Meyer (1993) on infrastructure privatization is also significant, as they set a pattern for the wider problem of infrastructure privatization.

3 Legal Structure and Managerial Flexibility

3.1 Institutional Framework

In most cases there is a Port Authority (PA), i.e. an organization acting as the land manager with responsibility for a safe, sustainable and competitive development of the port. Frequently the PA is also responsible for the development of the port, the management of the terminals, the provision of stevedoring and other services, such as towing, nautical support, etc. This context of operation is generally considered as a 'public port'. A public port exercises directly the right or hosts the relevant authorities for the enforcement of national rules and regulations, related to safety, security, pratique, customs, etc. Employment, tariff structure, marketing, financing, infrastructure development and practically all important managerial decisions are monitored by governmental bodies, revealing or servicing wider policies, and in several cases also require a permission from a political authority ex-

pressed by the minister, the mayor or a relevant body. Most ports worldwide are still public ports; Singapore consists a successful example of public port.

A landlord port is a port organization exercising granted rights and enforcing rules for the development, management and control of the port area, as well as safeguarding nautical access, port infrastructure, environmental issues, and enforcing security and safety regulation. A simplified definition is quoted also: “At a landlord port, the port authority builds the wharves, which it then rents or leases to a terminal operator (usually a stevedoring company). The operator invests in cargo-handling equipment (forklifts, cranes, etc), hires longshore laborers to operate such lift machinery and negotiates contracts with ocean carriers (steamship services) to handle the unloading and loading of ship cargoes” (AAPA, 2009). In the landlord port, private interests undertake the development of infrastructure and of stevedoring, i.e. the critical tasks for the ‘every day’ performance of the port. This port management model enables public management and authority over the development of the port, tasks commonly linked to national interests and financing needs exceeding the capabilities of private interests. Efficient and successful ports, such as Rotterdam and Hamburg, based their development on this model.

An alternative to the landlord model is the tool port model, where superstructure is also owned and planned by the public. Private interests provide stevedoring services. Although the difference to the landlord port is slight, the implications in terms of development planning are significant. Houston and Marseilles are tool ports.

Contrast to the public and landlord models, the management of a private port controls the development, the maintenance and the operation of infrastructure, superstructure and stevedoring. Gioia Tauro in Italy and UK ports offer a coherent example.

Services like towage, utilities, reception facilities, mooring, etc. are commonly provided by various providers or by a pool of providers in most ports, regardless of the governance model. Moreover, regulation of any kind is in most cases public, yet with the exemption of private ports.

Summarizing the above, the legal structure of a port (or of a terminal within a given port zone) is broken down as follows:

	Infrastructure	Superstructure	Stevedoring	Other
Public	Public	Public	Public	Public mainly
Landlord	Public	Private	Private	Public/Private
Tool	Public	Public	Private	Public/Private
Private	Private	Private	Private	Private mainly

The above analysis is focused on operations and development; from a legal point of view the critical question is ‘who owns the land’. Although impossible to generalize, land is usually owned by the State, and the right of exclusive use or exploitation is granted to the PA. In addition, as State interests are expressed through a specialized agency, say a Ministry or an Independent Body, this agency grants the right of developing or of managing a port. Nautical access, dredging and similar large-scale infrastructure problems rest primarily with the State, although co-financing or consideration of the interests of stakeholders (private as well) shall be expected. As a final point, one should clarify that dedicated terminals are reserved facilities for a customer, say a container terminal will serve only a specific customer for a given yet relatively long period of time, and their governance is at this point irrelevant as they are the product of a contractual agreement. In practice there are also some intermediate approaches, where some customers enjoy preferential rights and treatment; this is also a product of a special agreement. The difference lies in the linked attributes of the capacity of the terminal and the requested handling volume by the carriers; if supply exceeds demand greatly then more customers may be served, yet only few enjoy the preferential status.

Excluding the State from the discussion on the development and the management of the ports is practically impossible. Under customary international law there is no general right of access to ports, except for ships in distress (under circumstances). According to the Law of the Seas Convention 1982 (UNCLOS 82), the existence of sovereignty over internal waters and the absence of any general right of innocent passage through implies also that foreign ships do not enjoy automatically the right to call a port in the internal waters. Although dictums from arbitration suggest that the ports of every State must be open to foreign vessels, unless national interests should be protected, the tribunal does not support this. The State’s ports are presumed to be open to international merchant traffic. From an international law point of view, the State enjoys the right to nominate which ports in their internal waters are open to international trade. The issue is also organizational as international merchant traffic presumes also customs, immigration and other facilities. States may also close their ports to protect their vital interests, safeguarding security, preventing pollution or even expressing political displeasure. Additionally, States may impose and prescribe the rules and conditions for access to their ports; although many cases are reported, the issue of double hull tankers (OPA 90 and Erika Package) is noticeable. Nevertheless other intergovernmental agreements confer rights of entry, as is the case of the EC Treaty on non-discriminatory and free movement of

goods, where Member States enjoy the reciprocal right of access to each other's ports. To end with this abridged parenthesis on international Law, States enjoy rights enforcing Port State jurisdiction, as per UNCLOS III '82, thus ports may host all the necessary bodies in their zone or adhere to their decisions, when servicing or hosting a ship, etc. In summary, it is the State determining and regulating the degree of openness to international trade flows and it is the State affecting the overall service of ships and cargoes at a port facility (Churchill et al, 1999, p.p. 61-64).

Moreover to the above, ports as nodal points of logistics chains, play an important role in the national economy. A port is a natural point for the concentration of employment, activity, networking, business and regional development. In most cases, ports are integral parts of urban complexes; the development of the port is commonly the locomotive for the development of the city. Recently the term port cluster, or maritime clusters are describing this add-value effect of flows and services provided at a city-port. Efficient transportation networks suggest also lower friction costs at the level of national economy and therefore a more competitive economy. Considering the competition among logistics chains, efficient ports may serve wider hinterlands and their impact can be apparent at the regional or even national growth rate. Ports are tools for efficient planning of regional and national economies. Towards this direction, the issue of employment is critical; it is not only the number of employees directly offering their services but also the magnifying effect at the local labor market. Free Trade Zones (FTZ), have been developed in many ports worldwide, in order to serve various goals of national economy.

Finally, ports attract the interest of intergovernmental organizations, such as of the European Union. Especially the EC enjoys the right of intervening in the port industry on the basis of free movement of persons, services and capital (Title III of the EC Treaty), common transport policy (Title V of the EC Treaty), common rules on competition (Title VI of the EC Treaty). Another interesting case is the application of ISPS Code, which is actually an Annex to the International Convention for the Safety of Life at Sea (SOLAS). SOLAS is an international Convention, produced and developed through the International Maritime Organization (IMO), focused on the technical aspects of seagoing vessels; SOLAS had no application on ports or facilities. At the aftermath of the terrorist attack of 9/11, the locomotive of port policy became the issue of security. As ISPS became a piece of international Law, and also of European Law, ports were obliged to conform to its provisos. Among other researchers and market experts, Psaraftis (2004 and 2005b) argues that security goals may contradict efficiency goals, thus jeopardizing the overall logistics efficiency of the ports as nodal points.

3.2 The Impact of the Institutional Framework

These models of ownership are the product of historical development and necessity, and their background depends strongly on the local market conditions, the local legal tradition and definitely social momentum at the time of transition or evolution. Technology has also a key-role, especially in the development of modern container terminals. In most case the technological trigger was the size of ships, loading and unloading rates and available facilities, as well as the issues of land use and urban development around the port zone. As an example, the service of mega-containerships, ships with a carrying capacity of over 9000 TEUS requiring also clear draft of almost 16m deep, demands dredging of existing waterways or the relocation of terminals. Either dredging or relocation of a terminal is a complex decision, affecting the interests of many stakeholders and in most cases it is deeply political. Commonly, these technological factors or decisions related to the implementation or adoption of a technology tend to lead not only to the development and transformation of terminals but also to the formation or makeover of local business clusters or zones of port logistics.

As technology is a relatively constant drive of port development, prudent political and administrative thinking, shapes the institutional framework with the criteria of sustainability, balancing of stakeholders' interests and servicing wider political goals, mainly of employment, social cohesion, economic growth, competitiveness and reduced externalities. If the institutional framework cannot adapt to the new technological and managerial conditions, then painful changes might be necessary, increasing the political cost and the business risks for the first entrants in the market. As an example, the corporatization of the Piraeus Port Authority (i.e. the transformation from a public independent body to a State owned corporate) was not a painful decision as no stakeholders interests were really hurt; however the limited-privatization of the corporate through listing at the Athens Stock Exchange, as 80% of the stock was held by the State, ignited frictions, frustration and discontent to many stakeholders, resulting to almost three years of delay of the whole project (Psaraftis, 2007a).

Stating again that no generalization is possible, governance models affect the agility of the managerial team to respond to commercial and operational challenges. Considering two extreme cases as an example, a private and a public operator, a public operator is usually bounded to employment and labor restrictions, stemming out of

wider labor policies in the public sector, thus affecting the financial efficiency of the terminal. In private operations, relations are usually more flexible, providing the management team with tools to respond to commercial challenges. However, a public company may sustain operational losses and invest in the development of large scale projects, such as new terminals, FTZ, dredging, improved hinterland connections, enjoying the back up of national funds and State aids. In contrast normally profit-driven private operators cannot pursue such projects unless there is clear future financial gain, or sustain losses for a long period as a result of a policy or of a commitment. Moreover, tariff structure and fee collection procedures may vary significantly. As in the previous example, the tariff restructuring in a public port may require the consensus of a monitoring body, say a Ministry, or even in some cases the monitoring body shall also ratify the grant of privileges to customers, such as a service priority or a rebate for transshipment volumes. In a fully privately operated terminal, the managerial team may enjoy greater flexibility. In summary a public port as a State entity, cannot usually respond to market risks and fluctuations as fast as expected by a private entity due to the commonly rigid and stiff legal pattern of operation of most State entities, thus reducing the flexibility and increasing the response time of the State-owned port to market challenges. On the other hand, a State-owned port may usually undertake or get involved in long-term projects that enhance the role of the port as nodal point or gateway to a hinterland, as there is no pressure from the shareholders for profit and they enjoy the financial support of guarantees of the State. The point of 'flexibility', as a response to market triggers, may determine decisions, as it relates with employment (cost of service), tariffs (revenue management) and the liberty of the management team to form horizontal or vertical agreements with other entities along the logistics chains (customers and suppliers relations).

3.3 *The trigger for Diluting Public Control*

Considering that ports are envisaged with relatively huge investments and volumes of cargoes, as well as their pivotal role in the regional or national economy, one should examine the triggers and rational of selling a piece of the pie to private interests, instead of retaining full public control. The answer to this question is simple: either because ports are very important to the national economy therefore they have to be efficient and flexibly respond to market challenges or by granting specific rights to privates it is expected to attract customers, exploit better currently available infrastructure and develop faster the regional or national economy. Vining and Boardman (2008), offer a thorough analysis based on economic theory and explaining issues of x-inefficiency and value-constellation. The authors highlight the failures of the market as 'prima facie evidence for government involvement' (p.553) and these failures are broken down into:

- Lack of supply of public goods in private markets (where a public good is non-rival and non-excludable and should be priced at zero price to be socially efficient, unless there are issues of congestion and then prices should be as high as the short-run marginal social cost, i.e. leads to an approach close to "user pays principle");
- Imperfect competition, where the issue of (natural) monopolies is discussed (as the monopoly may be imposed by the geography of the region, i.e. only a specific location may host a port);
- Externalities, such as negative ones: congestion, pollution, urban fragmentation and positive ones: economies of scale, economies of density and other network agglomeration effects, may determine policies.

In fact, many State-owned enterprises and not only ports have experienced problems or demonstrated attributes listed below:

- Financial losses and insufficient return on investment:
 - *Losses and/or need for direct state aid or subsidies:* It is possible that the operational outcome is not positive or it is also possible that part of the income is directed to investments not necessarily directly related to the port zone, and state aid is required for sustaining operations or covering specific parts of the budget, say salaries and wages. The inflow of state capitals may distort competition or result the carry on of loss-making operations or services. At this point politics may influence the decision, as a loss-making operation may have a significant impact on the local economy or serve wider national goals. Nevertheless, state aids might not always be allowable or they may have to be transparent (consider also the rational of the 'Port Package').
 - *Indirect subsidies hiding losses and/or affecting heavily operational outcome:* In some other cases the State may subsidy operations indirectly; for example the State may finance the salaries of administrative personnel, who may be considered as employees of another entity, say of the monitoring Ministry, or they may enjoy a privileged status. Another possible indirect subsidy may consist a preferential tariff of services offered by other State-owned enterprises, such as of the telecommuni-

cation company, or the obligation of State-owned entities to make use of the port services. As above competition is distorted, transparency and candor are dashed, as well as the function of the port is shifted from a logistics nodal point to a political tool for the exercise of other than transport policies.

- *Cross-subsidies between business centers affecting heavily operational outcome:* This may be the case, where a terminal is profitable and it subsidizes the operation of a loss-making terminal. The operation of the loss-making terminal may be dictated by other policies; Psaraftis (2005a) reports the cross-subsidy of the passenger terminal for the coastal ships in the port of Piraeus from the profits of the container terminal, due to wider social cohesion needs and policies of the Greek State.
 - *Large accumulated debt, mainly due to investment in infrastructure or even excess equipment:* This may be a typical state after a miscalculation of investment needs or the result of blind competition between ports, where excess infrastructure or superstructure demands new cargo flows to become operational viable or impose a heavy burden on the accounts of the port. The attraction of new customers, depreciation, maintenance and other costs may demand direct or indirect subsidy or financial support.
 - *Losses or debts due to investments not directly related to port operations:* This may be the case of the involvement of the port in related business sector yet not directly linked with the port function, such as the lease of facilities and resources to a local pool of shipbuilding and ship-repair units. Shipbuilding is an industrial activity, and the financial relation of this activity with the core port ones, is by no means intertwined. Losses from the ship-repair units may impose a burden to the current accounts of the port or deprive the port from the chance to develop a new terminal (core business) or utilize better the leased resources (opportunity cost).
 - *Undercapitalization:* This may be the case in many Less Developed Countries (LDC), and not only, where there is a lack of capitals for the support of operations or the development of infra- and superstructure for the service of new ships and cargo types.
- Excess power of the political forces over port management
- *Management changes due to changes of persons and priorities at a political level:* In most State-owned entities, the management team is appointed by the monitoring Ministry or related body, and reflects the political priorities as well as biases of the chief political person, say of the Minister. A change of the chief political person or a change of the government or a change of the political agenda may vigorously be reflected on the managerial team and the priorities of the port management. This is often the case in many State-owned companies, and examples are available also in developed countries (Doganis, 2007). To the author's opinion, the worst scenario is not the application of a flawed strategy, but the lack of any strategy and the interference of the government to tactical planning and implementation, as well as a biased attitude towards some stakeholders and against scientific approaches (see also below).
 - *Direct government interference:* As stated above, it is possible that the government interferes in tactical and operational issues, thus jeopardizing the strength and the will of the management team to act and respond to challenges. In many cases, governments may interfere indirectly in tactical and operational planning, as in the case of tariff structure; for example, it may be institutionally required to ratify a new tariff structure reflecting current trends and needs in the industry proposed by the port management at a Ministerial level, yet it is not possible due to wider macro-economic policies, say inflation control. Following this example, irrational charging may lead to many vicious circles, such as undercapitalization, distortion of competition, marketing issues, etc. At the same wavelength, a public port may demand the hiring of experts or of permanent personnel, yet due to macro labor policies this is not possible; this is also the case for the other way around for the lay off of employees in times of financial distress or drop of the traded volumes and the served ships.
 - *'Straightjacket operation':* In addition to the above issues, it is commonly required a State-owned port to operate under the stiff and rigid institutional framework of the public service as well as to serve the interests of the local economy (say employment, reduced externalities, etc.) yet at the same time it might be required to possess the ability to respond as flexibly as non-State owned ports to competition and market challenges. This contradicting and frustrating set of goals and constraints is common in many State-owned companies, and at least in the case of ports, does not only affect critical functions of the management, such as the use and mix of resources, tariff structures, ability to get into agreements with customers, etc. but also issues of comparatively minor significance, yet very important for the smooth operation, such as procurement of services and stuff, financial management of non-tangible assets (capitals, logos, etc.), development of new units or functions (commonly a change of the organization requires ratification), fleet management (licens-

ing, maintenance, renewal, operation of all related vehicles), etc. Furthermore, one should also consider the decision process, the necessary time for the maturity of a strategy or of a policy and the levels of command and responsibility.

➤ Poor service quality

- *Comparatively lower productivity to competing terminals:* Although it is not necessary a State-owned port to be less efficient, there is a conception based on statistical evidence that a private terminal is more efficient. The issue of efficiency and productivity of the input-output mix is complicated; productivity should be considered on the basis of the quay length available, the number of cranes, the working hours devoted, the productivity of the crane, berth and yard utilization, and so on. Due to the needs of liner shipping companies, the discussion on productivity is concentrated on the negotiation points of lifts per hour and crane or total lifts per hour for the ship served; many terminals in the Far East are very efficient, and in Europe a rate of around 30 lifts per hour per crane are considered as market expected. Obviously, at a micro level productivity may vary among terminals of the same port also, and depends also on the ship size and many other conditions for the proper measurement. At a macro level, dwell time, idle time and many other time-components may negatively water down the productivity at the micro-level to an unattractive logistically (not only handling) port option.

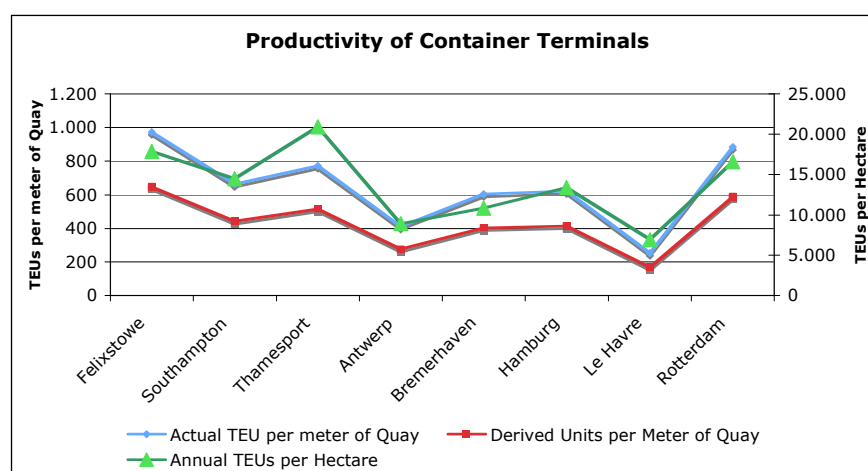


Figure 1: Productivity of Container Terminals (UK DoT, 2001, p.14)

- *Outdated processes and administrative procedures or operational culture followed on administrative procedures and not the needs of the customer:* Apparently many State-owned entities are not customer-focused or oriented. Even if the management and employees agree or desire a more flexible and customer-oriented approach, they might have to deal with the rigid institutional and operational framework, as discussed previously (see the comments on 'straight jacket'). Moreover, as many State-entities enjoy a dominant position in the local or regional market with a comparatively larger size than that of many other private entities, thus expecting customers to adapt to their practices.
 - *Lack of marketing strategies and decision support on the basis of marketing needs:* This is a very interesting point and topic for further research or business development. Many ports, especially of small and medium size, primarily belonging to the State, lack a coherent marketing policy or the administrative tools and resources for the promotion of the port services among customers. This problem has been identified and addressed at research level (Trapist, 2003), yet it will attract the interest of the port management, as ports shall follow a more competitive marketing approach as they compete other logistics hubs for the same hinterland.
- Managerial Problems
- *Labor Issues:* In many ports issues related to the human resources dominate efforts from the management, as problems of over- or understaffing are faced and labor terms jeopardizing competitiveness. Briefly the following labor issues may raise questions for the dilution of absolute public control:
 - Overstuffing or understaffing or imbalanced distribution of employees per department or function;
 - Unrealistic or uncompetitive labor terms and conditions;

- Inefficient or politically motivated human resource management;
- Excess power of labor unions.
- *Decision Making Process:* By summarizing some of the points analyzed in previous paragraphs, many port organizations face fundamental managerial problems, as lack of strategy and marketing as well as bureaucratic and complex processes thus maintaining and upholding a slow decision process that primarily sustains the status quo instead of pursuing the interests of the port in a competitive environment. These problems are usually classified as:
 - Unclear development strategy
 - Excess bureaucracy
 - Delay in innovation
 - Slow decision-making process

These problems are not solely and inherently setbacks of State-owned companies. The above problems in combination with the inability or the reluctance of the State to finance further the development of the port infrastructure leads to the deregulation, which is expressed mainly in the forms of:

- Shifting from a service model to a 'landlord' model;
- Leasing through concession of a terminal to private (commonly specialized stevedoring) entities;
- Granting a built-operate-transfer (BOT) contract for the development of new infrastructure;
- Corporatizing public entities and releasing them from a close public control, especially in the fields of tariff and employment policies;
- Diluting public control through a sale of shares to a strategic partner, who will commonly undertake also the management, or through listing the company into a secondary market, inviting private capitals to invest and offering some managerial control;
- Combining options presented above with respect to diminishing public discontent.

In some cases the motives are also ideological, yet in most cases political reforms, lack of public funding and immediate need for private capital inflow resulted the deregulation of port services or the participation of private capitals in the owning scheme of the infrastructure.

4 Diluting Public Control

As analyzed previously, market failures suggest or trigger government involvement in the port sector and operational issues mainly suggest the dilution of the public control. Once again it is stated that every port case should be examined as a one-off case, given the social, market, economic and geographical conditions, which seldom resemble among different ports.

When the deregulation of a port is promoted as policy, it practically means the simplification of the institutional and legal framework or the removal of barriers constraining the operation and development of market forces. In most cases this deregulatory policy is expressed through privatization or put it on another basis and freely interpreted through public-private-partnership. Privatization can assume many forms and the most common in the port industry are:

1. The sale of existing state-own enterprise or infrastructure or exclusive rights to use the port infrastructure;
2. The use of private financing and management for new projects (port development, new terminals, etc.);
3. The outsourcing of services previously offered by governmental agencies, bodies or departments of state-owned companies.

Interesting examples of the above models are:

- The UK ports, where most of the largest ports are in private-sector ownership. Major ports such as Liverpool, Felixstowe, Tees & Hartlepool and Forth Ports are privately owned. Privately owned ports are also considered the 21 ports owned by Associated British Ports (ABP). ABP was formerly a nationalized industry, the state-controlled entity "British Transport Docks Board", but was privatized in 1982. Many other private ports were formerly trust ports, which were privatized in the early 1990s. The UK Government has no ownership interest in any of the ports in this sector, and all their investment has to be privately financed on a commercial basis. This sector accounts for some two-thirds of the total tonnage handled in the UK and comprises the most important ports and facilities.
- The landlord ports of Northern Europe, such as Hamburg, Antwerp and Rotterdam, where port is a commercial structure and its undertakings are private, in a State controlled and owned area, the port zone, under also a public coordination.

- In Argentina, a 20-year seaport concession was signed in 2007 for Bahia Blanca Container Terminal.
- Greenfield port projects:
 - Qingdao, China: New Qianwan Container Terminal Joint Venture, where private equity of almost 59% is provided by Dubai Holding, AP-Moler-Maersk and Pan Asia (World Bank 2007, p. 5)
 - Tianjin, China: North Gangchi Container Terminal, where private equity of 49% was provided by the PSA of Singapore, (ditto, p.5)

There are many more examples in the business literature, yet what is really interesting to note that privatization in most cases and countries has been accompanied by diverse regulatory and political packages, attacking not only core-port issues, such as stevedoring, abolition of monopolistic practices, rights of use and service but also labor relations, social security rights, urban development, participation of the stakeholders in the management of the port. All these issues are also deeply political and raise interesting questions, which can be summarized as following:

- Is it wiser (or economically more rational) to optimize the port assets or to optimize the port functions?
- Is it appropriate to examine and consider the port as a port area/zone or to consider it as a multimodal/intermodal transfer point and logistics hub?
- Is it adequate to consider market demands as the critical decision parameter or to consider a set of market, social and competition criteria?
- Is it adequate to consider managerial structures such as the Port Authorities or is it necessary to shift to specialized managerial structures, such as port operator, port manager, port developer, etc.?
- Is it possible to operate a port under the wider public service guidelines or is it imperative to shift to market-driven managerial models due to international port competition?

These questions have been widely discussed in the business and academic literature. The answer depends heavily on the business and social pattern, however it is possible to outline the challenges and driving forces:

- Market – Business
 - There is a continuous need for more space, either due to capacity constraints or due to expansion. In the first case, a vivid business community desires to serve more volume but the capacity of the port terminal imposes a limit. In the second case, the vibrant business sector desires expansion of current port activities and there is a land or environmental constraint. In both cases, new capitals should be found in order to support the project and sustain the agglomeration effects of the port as nodal point.
 - There is the question of dedicated services. As the container business evolves, they develop vertical and horizontal alliances, increasing the efficiency of the logistics chains and therefore demanding higher productivity and efficiency from all involved parties. For the terminals this is translated as guaranteed service time and productivity, thus major liner-customers demand and negotiate exclusive or priority rights in service. Similar problems may evolve at dry and liquid bulk terminals, where the loading/unloading rate and total dwell time may determine the preferences of the customers and therefore determine also the competitiveness of the port as nodal point.
 - Customers demand one-stop-shopping, meaning that all required services can be adequately offered at the specific port; this is not a global attribute of all ports, and only the major ones, usually national gates, offer this option.
 - Port marketing, as a function of the management, may attract new customers, and enhance the logistics chains crossing through the port, thus increasing the volumes and the significance of the port as a nodal point. This marketing actions focus primarily on forwarders and frequent shippers or relatively large volumes of commodities, hence increasing also the interest of shipping lines to call the port or to use it as a logistics hub.
- Social
 - The issue of congestion is closely related to the environmental burden. Congestion may deteriorate hinterland and urban connections to the port zone (highways, bridge crossings, etc.) as well as nautical passages (channels, estuaries, etc.) resulting a decrease in the quality of life. Congestion should also be linked with wasted labor-hours (man-hours), lower return on transportation assets (lorries, rail wagons, cranes, etc.), urban fragmentation (endangering social cohesion and therefore a root of many other social issues), as well as with accidents and increased demand for more public spending in infrastructure. It is already identified as a symptom of market failure, demanding State intervention; last but not least

- prolonged congestion issues around or in the port zone degrades the competitiveness of the hub and decays the level of service.
- Environmental issues are critical and they attract the interest of the local but also of the global community. The quality of air, sea and land around the port as well as the environmental burden imposed due to the operation of the port as well as of the ships and transportation means involved are closely monitored by State (and sometimes intergovernmental also bodies or non-governmental organizations), resulting exercise of political pressure, legal or even extreme actions by activists. The protection of the environment as stipulated by the international legal regime (see also §3.1) is an obligation of the State, and in commercial maritime business is expressed through international conventions, such as MARPOL, CLC, Intervention and other, drafted and enforced through the International Maritime Organization (IMO). Lately, the new Annex VI of MARPOL seems that will affect heavily the port industry, as ships must use multi-fuel systems and control their emissions, thus affecting operations and questioning the availability of bunkering in many ports. It is not an exaggeration to state that the port is not only a transport and logistics hub but also an interface of environmental risks and regulatory actions for a given region².
 - Along with congestion and environmental issues, the demand for employment either directly by the port authorities or managers or indirectly in companies offering their services to port clients or related entities is pivotal. The port is directly or indirectly one of the main employers at a regional level. High employment and increased commercial returns may also balance negative externalities and prevail calm among various stakeholders.

Apparently all the above political issues and questions are frequent points of friction, as a status quo is distorted and a new equilibrium is required. Definitely the process to privatization creates winners and losers, and the clashes are commonly fierce. In addition to the above, the selected process may create friction as well as reveal the grounds or justify the decision for the dilution of the public control.

Countries with a relatively high public deficit are in need of private capitals to finance development. Increasing the public debt is not always possible and the option to lease a facility for a relatively long period serves simultaneously many goals:

- Development
- Efficient operation of the terminal
- Employment and social cohesion

Another problem usually faced by countries is the timely completion of projects. In many cases lack of capitals, expertise and resources cause the delay of the work progress. The leasing of a facility or the set-up of Build-Operate-Transfer (BOT) scheme may be promoted as a solution.

Often States include port facilities in an infrastructure portfolio deemed to be privatized, as the country faces managerial and financial predicaments. This portfolio may also become a financial stimulus for the economy, and dilution of State-ownership through capital markets is to be expected. The offering of shares through a stock exchange may attract private capitals yet the management structure remains practically unchanged, unless there is a strategic private partner guaranteeing flexible and professional management. The role of stock markets is critical in this case, as the liquidity of the market is of fundamental importance and this is strongly linked with the economic outlook and horizons of the country, as foreign investors risk their capitals in countries with a potential for profit. Listing the owning or managing entity of port or of a terminal in an organized secondary market may also attract the interest of foreign investors to support the development of the company, as well as to accelerate the entrance of strategic partners and enable commercial alliances. The prerequisite for this strategic prerogative is no other than an independent, professional and flexible management scheme reflecting also the real power of shareholders as well as the restraining of the excess power of stakeholders to influence corporate decisions. Furthermore, governments may seek for an immediate financial gain when outsourcing, even if the cash flow revenue does not recover the original investment, or serves other goals, such as pension funds for the employees (Psaraftis, 2007a and 2007b). Both these cases are strongly intertwined with the deficit of the government, growth rates and other economic indicators, however as in the case of Europe, privatization may express broader policies, such as of free competition and of the abolition of monopolies, thus deregulation may be expressed through privatization or governments may be forced to dilute public control for the sake of these policies (Gómez-Ibáñez et. al., 1993, p3).

² One should also consider the case and impact of conventional ballast water operations, where local sea flora and fauna were heavily damaged by the migration of alien microorganisms in ballast tanks, leading to 'ballast water management' monitoring and regulation by the IMO.

Obviously a shift from public to private creates winners and losers. Undoubtedly labor privileges cannot be sustained or tolerated in an environment of fierce competition, especially in intra-port competition of terminals, and development along with externalities, both positive and negative, will also stress further imbalances and retained rights. The issue of externalities is very complex and will attract more interest in the future as transport networks become more congested and green-field projects will relocate activity from overpopulated, overcrowded and block-up traditional city-ports. At this point the representation of stakeholders efficiently in the corporate scheme or the granting authority raises political, moral, social and economical issues, while the major risk is the delay of the development procedure through court action and litigation.

4.1 Expected Impact

The decision for deregulation of the industry, usually for the privatization of a facility, involves deep political and economic issues and escorts the government to clashes with established interests. The expected impact of the deregulation determines much of the decision and the process. The expected impact shall be discussed on the following axes:

- Establishment of an intra-port competition scheme;
- Taxes and fees levied
- Social Rate of Return
- Level of service
- Flexible tariff and employment policy

The case of the intra-port competition is very complex and applies only in hubs of international importance. The imperative condition for effective intra-port terminal competition is the availability of cargoes. In a port handling only some thousand TEUs annually, intra-terminal competition cannot be meaningful unless there is a special condition. High volumes, high dwell time currently and generally reduced level of service will trigger the discussion for intra-port competition. In this context, the regulating authority, usually the PA, shall set the rules. At this point, the scenarios are commonly similar in various ports: either there is no facility to lease and the development of a new one is required, or there is a facility and the question is how to lease it. In both cases, the problem has two aspects; the process should protect and enhance a balanced set of competitive advantages for the new facilities and the return on the existing assets or the development of new facilities should reflect simultaneously fair and market values.

Using as an example the port package in the EU, which was rejected (see also §2), there was a proviso on the general guidelines for the intra-port competition. For example the duration of the authorization of an operator was a parameter of the invested capital on assets and infrastructure, meaning that operators who finance development may extend their presence in the port. At the same time, the granting authority retained the right to select operators on the basis of a transparent procedure and any set of criteria required, such as financial and performance ones. Although this approach seems fair for new projects, it bears injustice to authorities and operators of service ports, where investments and development were not solely focused on terminal operations and efficiency. Along with the dilution of power of some stakeholders, such as of the workers' unions, this unfair and naïve approach, generates social friction and political risks.

Furthermore, intra-port competition is expected to force terminal managers towards leaner and more efficient or productive operation, which also suggests a rationalization of the administration as well as of the number and skills of the employees. In a fictitious scenario, where a service port is forced to evolve to a corporation and face intra-port competition and assuming that all financial issues related to existing infrastructure are resolved, then a clear case for distortion of competition may come up, as the scheme that evolved from the previous service port managers, is commonly overstuffed and experiences public service control, monitoring or business culture problems. An intra-port competition regime seems efficient and is on the basis of logistics competition desired, yet it is not so easy to draft, ratify and regulate, as distortion of competition, social discontent and political risks are probable. Learning from the European experience, a top-to-bottom approach resulted to alliances of conflicting interests against the new institutional framework; a long consultation with the stakeholders ensures that at least some interests will back up the change and produce also a better balance of externalities.

The issues of taxes, tariff policy and returns may be easily demonstrated on the basis of a simplified example. Assuming a container terminal investment with the following attributes:

- 1) Operations
 - a) Initial Throughput 500k TEUs
 - b) Annual Growth of throughput 2,5%
 - c) Upper Handling Limit 3500k TEUs

- 2) Tariff
 - a) Mean handling fee 150\$ per TEU
- 3) Investment
 - a) Total Amount 400M\$
 - b) Private Equity 50%
 - c) Subsidy equals Total Amount minus Private Equity
 - d) Construction period 5 years (no revenues accrued)
 - e) Concession Fee (fee for the exclusive right of using the land) 1% of the gross revenues
 - f) Corporate Tax 25% of Gross Profit with a grant period of 12 years (including construction period)
 - g) Maintenance cost estimated around 2% of the investment per annum
 - h) Other costs estimated around 1% of the investment per annum
 - i) Depreciation (Tax shield) 10 years
 - j) Duration of the investment 35 years
- 4) Labor Cost
 - a) Wages 20M \$ annually
 - b) Annual Growth of Wages 4%
 - c) Subcontractors and direct labor expenses (non-wages) 25% of the annual wages-amount

Given the above figures, one can easily estimate a NPV of the total investment close to 364M\$ and an IRR of 14,45% at a discount rate of 5%. The State will collect the concession fee and the taxes; after the construction period the minimum land fee amounts 750k\$ and the corporate tax after 12 years will amount close to 11M\$, assuming a steady growth of all revenues and expenses as per the model above. Considering that the State will also subsidy 50% of the total, i.e. will invest 200M\$, then the NPV for this cash flow is negative (around -70M\$), thus discouraging any further discussion. However, if the cash flow streams of the wages, maintenance, others and subcontractors costs are taken separately into account, a very positive result is yielded of almost 650M\$ NPV. This is the social benefit enjoyed from this investment. However, there is a drawback in this calculation as no externality is taken into account. The negative impact of congestion and pollution is not estimated above, as the positive magnifying effect in the regional and national economy is not taken into account. This approach is solely focused on the investment.

Demonstrating the impact of policies, this oversimplified model yields an extremely positive social benefit if the State does not finance the development of the terminal, and a consortium undertakes all financial responsibility of the venture: the NPV for the investors decreases to 190M\$ and the IRR to 8,2% yet the NPV for the State (concession fee and taxes) increases to 100M\$ and the NPV for the 'public' remains unchanged. The ability of the government to attract investors is critical for the outcome of the investment; this 'ability' is in practice translated as a set of institutional incentives, promising economic growth and rules mitigating or minimizing risks in comparison to other competing States or regions.

The impact of the concession fee and of the tax levied is also clearly reflected yet it is not as important as usually considered; assuming the initial 50-50% financial scheme a decrease of the corporate tax from 25% to 15% increases slightly the NPV for the investors to 368M\$ while the NPV for the State deteriorates to -100M\$. However the liberty to adjust tariffs, and in this particular oversimplified approach, the average fee per TEU, affects heavily the financial outcome as a decrease or increase by 10% of the average fee (originally set at 150\$ per TEU in this model), yields a decrease or increase accordingly of 27% of the NPV for the investors, i.e. a shift of $\pm 15\%$ of the IRR, and a change of $\pm 30\%$ of the NPV of the State respectively. Finally one should never forget the elasticity of the service, which is fundamentally linked with the price of the service, thus a shift in the price will definitely yield a shift of the throughput. The elasticity depends heavily on the nature of the cargo, as transshipment volumes are very elastic while import-exports are primarily captive volumes and inelastic. The liberty to adjust prices is very strong tool in the hands of the management.

In addition to the above, the employment policy and elastic labor relations may affect the financial outcome. *Cetera paribus*, if the wages decrease to 15M\$ and the subcontractors (other labor) cost increases to 35% the NPV increases for the State and the investors, yet the NPV for the public is decreased by almost 15%; this is the social price of higher labor elasticity.

The above analysis is oversimplified and by no means exhaustive, yet it demonstrates the need for a balanced approach when shifting to a new port management scheme or deciding on a new port investment. If the model includes also the environmental impact and possibly other indicators of social impact (say the cost of accidents or the benefit of cluster effects) then the decision maker may draft the appropriate rules balancing the interests and forces. Some more points before concluding this analysis have to be highlighted as well because they influence decisions and in some cases may also be part of the expected impact of deregulation, even if the quantification is very complicated:

- a) *Level of service and social rate of return*: although not depicted in the model the level of service of the terminal influences the attractiveness of the logistics node, and thus affects the agglomeration effect of the hub at a regional level. An efficient terminal suggests an efficient logistics hub and therefore attracts more cargoes, increasing also employment and related social benefits. The opposite is also evident in port cities where the level of port services deteriorates.
- b) *Profitability vs Economic Efficiency*: corporate profits and economic efficiency are not necessarily linked or streamlined. The focus on accounting or economically measured benefits should also be taken into account (Gómez-Ibáñez et al, 1993 p254).
- c) *Prices and cost monitoring and control*: the lack of cost control monitoring mechanism as well as of internal audit schemes are typical in large state owned organizations resulting to an aggregate accounting depiction of the organization, while information on cost and revenues centers is missing, thus making impossible to apply principles of accounting and estimate the unit cost or the unit profit of service per terminal. Lack of information on cost and revenues services, may hide cross subsidies among terminals as well as jeopardizing efforts for transparent pricing and negotiation with major clients. Using once again the European example, the drive behind port package was transparency of public and private funding to ports; in a service port for example, a profitable terminal may cross-subsidy a non-competitive or profitable terminal, whose operation serves other purposes. Moreover, transparency is required when negotiating prices and services; obscured figures and estimations may threaten the final outcome, hamper the set up of pricing scheme for an innovative or sizeable service or discourage customers to wiser consumption or wiser use of the agreed service. Concluding obscurant price and cost practices cannot support the linking of port interests and revenues with those of the customers and customize services, as required in the contemporary logistics markets.
- d) *Forecasting demand and data availability*: this issue is of critical importance for planning purposes; if the statistical data collected cannot support further marketing and strategic purposes then the management shall redesign the system and set up a network for the collection of the data. This function is of vital importance not only in large hubs, where competition is fierce, but also in small and medium ports, where traffic could be diverted through the port enhancing the sea-land logistics chains and increasing the relative importance of the port in the region.
- e) *Stevedoring and other services*: stevedoring and cargo handling are the primal services offered in the port zone for cargoes and their functions shall be analyzed in a separate chapter, however it is important to mention the flexibility required for the adaptation to seasonal and unexpected fluctuations of the throughput, as well as the skills for the minimization of errors and the increase of productivity. Productivity is linked to the skills and management of the human element in the terminal. The same applies to other services, such as towing, mooring, etc.
- f) *Managerial team*: the level of expertise and skills of the port management team is also very important and not reflected in calculations. The managerial team may attract customers and may lead the port to higher internal efficiency and productivity.

4.2 The Bid Process

One of the trickiest points in the deregulation process is the process of privatization or generally of shifting to a new institutional regime and commercial equilibrium. Focusing on the main points of a concession agreement and taking into account the variety of legal traditions and backgrounds in many countries, the below analysis highlights the main axes of the designing of the process and its negotiation. Moreover, one should always recall that there is no sense to define and award a concession agreement in a competitive and without entry-barriers markets. The design and the award of concession agreement arise only in cases of regulated markets. Usually port markets are regulated.

With the bid process, the State exercises its rights to limit the power of private monopolies or to strengthen public ones (say of labor nature). The goal of the process to transfer property rights and to limit the exploitation of the facility (existing or new) given some terms and conditions. These terms safeguard wider policies and political goals, such as externalities, employment, efficient logistics chains and competitiveness of the national economy. In other words the terms and conditions are limits, either operational or financial. There is cases were these limits are fixed or depend on the financial or operation performance of the concessionaire, as for example in the previous example where the fee depends on the revenues.

Although almost everybody agrees that ports are a very precious and sensitive part of the national infrastructure, there are arguments against special procedures claiming that standard rules and procedures may handle all

cases and special procedures, bids and concessions do not serve best the interest of the country. The answer to these claims depends heavily on the legal background, the efficiency and experience of the administration, as well as the market conditions. Generally, one should ask if the auction help obtaining the best terms for a concession arrangement from the point of view of the conceding authority, as well as permitting re-negotiations after some years on points with a dynamic nature, such as market issues, throughput, technology, etc.

In all cases, the bidding or negotiation process should be fast enough and be priced accordingly. A length process discourages potential bidders, who have investment plans with a given horizon. Furthermore the cost should be the appropriate, because if it is very low many bidders without the required capacity or expertise may submit a proposal and delay the procedure or distort the process, acting as vehicles for bidding strategies, or if the cost is very high then bidders may be discouraged and leave the competition.

A critical point of the whole procedure is transparency and the political bias or favoring of influential bidders. These points relate to the available information, part of it released through official channels and is available to all bidders, and some of it acquired through other channels and experiences. Information, along with capacity and expertise enhance the bargaining power of a bidder. Finally the process should foresee clearly the conditions and the terms the bidding process may be repeated in the future, a point, which is of critical importance for natural monopolies, long lasting awards and potential market failures.

Stressing the required expertise for the port sector, it is possibly required by the administration to draft the bidding process in such a way permitting and encouraging technological and operational innovation from the bidders. It might be required to shift the attention from given operational indicators and financial ratios to a wider concept and vision of new solutions. Innovation should be examined and linked with the incentives discussed and agreed in the final documents.

The process should briefly focus on the following issues, which will also dictate the final agreements and set the negotiation lines:

- 1) The scope and goal (What is to be awarded?):
 - a) Construction of infrastructure?
 - b) The right to use the infrastructure?
 - c) Operation and maintenance of existing assets?
- 2) Performance specifications
 - a) Output or performance targets
 - b) Detailed analysis of investment plans and related obligations
 - c) Quality of the investment (level of service or applicable standards for the construction and maintenance)
 - d) Other obligations
 - e) Terms of termination
 - f) Provisos for the period from the award till closure of all financial issues (interim period management)
 - g) Possible future renegotiations (points not discussed or depending on time)
- 3) Incentives Schemes – Risk Control
 - a) Tax, investment and similar benefits for the concessionaire (including also State guarantees)
 - b) Risks out of concessionaire's control
- 4) Post award contract adjustments, control and monitoring
 - a) Service continuity
 - b) Performance guarantees
 - c) Government guarantees
 - d) Monitoring conducted by the Government or any other independent body

The process may be very complicated and sophisticated; auction procedures run by specialists may protect interests of all sides involved and yield optimum results. As deregulation is a political subject, the political sustainability, the robustness of the strategies, of the bidders and the potential for collaboration among competitors are factors guaranteeing the success of the whole venture. The balance of forces and all interests involved shall be taken into consideration at all steps.

5 Concluding Remarks

Global trends in trade and logistics exercise pressure to the States to deregulate the port industry. Although most ports are state owned or controlled other models of ownership, such as of the landlord port, are proved to be more efficient or market-oriented, as they combine the interests of the State and of private investors. The attempt to deregulate the market at European level triggered research and a re-consideration of the public-private

relationships in ports. It became once again obvious, although clearly prescribed in the international law, that States have a dominant role and position; it is not only the importance of ports as logistics hubs, but also the balancing of various forces and interests expressed by the stakeholders. Economic efficiency and enhancement of competition are not the sole criteria to be taken into account. However, the dilution of absolute public control and the introduction of private capitals, seems inevitable in cases, where:

- Financial losses occur;
- Lack of development funding is eminent;
- Undercapitalization and deterioration of existing structures imperils operations and social needs, such as employment and cohesion;
- The managerial team cannot cope with the problems, due to lack of expertise or counter-productive and counter-competitive operational framework;
- Poor service quality and decreased productivity weaken the competitive advantages of the logistics flows.

The dilution of public control is commonly occurred through the sale of existing infrastructure or the through granting the right to private interests to develop and use new infrastructure. Nevertheless, outsourcing of tasks and services is also a common way to restrict public monopolies and attract private capitals. The decision for the dilution of public control is primarily political and is linked with economic and market prospects as well as social issues, externalities and intergovernmental, top-to-down, policies. Public deficit may also lead to privatization solutions, as governments use infrastructure portfolios as macro-economic stimuli and base planning on cash flow streams.

A potential public-private scheme will deeply affect the management and operation of the port or terminal management company. The tariff and employment policies, the flexibility in negotiating with customers, marketing and technical management of the terminals are only some of the most important fields of change. Additionally the cultural shift from a pure public organization with a given set of priorities to a new public-private or even pure private organization is potentially the most important benefit for the existing port management entity. However this shift will definitely create winners and losers.

The bid process shall be transparent and accurate; what is to be awarded, operational and financial goals, tasks and rights of parties, risks and exit plans shall be included in the negotiation and final agreement texts. Provisos for renegotiations and future exit plans, in case a party fails to fulfill obligations or market conditions are heavily altered, safeguard the interests of all parties and augment the endurance of the agreement.

Readers and researchers requesting deeper analysis and case studies may consult some of the references provided below. The databases of the World Bank offer examples of the way States and private interests agreed on public-private schemes. No case is identical to other, although similarities supply parties with arguments and awareness of risks, and this is a result of the local political, social and market conditions.

Literature

- American Association of Port Authorities -AAPA (2009) *Glossary of Terms*, <http://www.aapa-ports.org/Industry/content.cfm?ItemNumber=1077&&navItemNumber=545>
- Baird, A. J., 2000, Port privatisation: objectives, extent, process and the UK Experience. *International Journal of Maritime Economics*, 2(2), 177–194.
- Brooks, M. R. and Cullinane, K. (eds), 2007, *Devolution, Port Governance and Port Performance* (London: Elsevier).
- Brooks, Mary R. and Pallis, Athanasios A.(2008) Assessing port governance models: process and performance components, *Maritime Policy & Management*,35:4,411 — 432
- Carlton, D. and Perloff, J., (1994). *Modern Industrial Organization* (New York, USA: Harper Collins College Publishers), p. 110.
- Churchill, R.R., Lowe, A.V. (1999) *The Law of the Sea*, 3rd Edition, Melland Schill Studies in International Law
- De Langen P.W. and Pallis A.A. (2007). Analysis of Entry Barriers in Seaports, *Maritime Policy and Management*, 34(5), 427-440.
- Doganis, R. (2007)
- Everett, S. (2008) *Public sector deregulation: a paradigm in conflict*, *Maritime Policy & Management*, 35:4,341 — 351

- European Commission (2001). Proposal for a Directive of the European Parliament and of the Council on market access to port services. COM (2001) 35 final, as amended by COM (2002) 101 final.
- Gómez-Ibáñez, J., Meyer, J. (1993) *Going Private; The International Experience with Transport Privatization*, The Brookings Institution, Washington DC
- Notteboom, Th. and W. Winkelmanns, 2001, Structural changes in Logistics: how will port authorities face the challenge?, *Maritime Policy and Management*, vol. 28, nr. 1, pp. 71-89
- Notteboom, Th., 2007, Strategic Challenges to Container Ports, in Devolution, Port Governance and Port Performance, *Research in Transportation Economics*, vol. 17, pp. 29-52
- Notteboom, Th., 2007, Concession Agreements as Port Governance Tools, in Devolution, Port Governance and Port Performance, *Research in Transportation Economics*, vol. 17, pp. 437-456
- Psaraftis, H.N. (2005b) EU Ports Policy: Where do we Go from Here? *Maritime Economics and Logistics*, No. 7, pp 73-82
- Psaraftis, H.N. (2007a) *Institutional Models for the Piraeus Port Authority*, Chios International Conference 2007 (in Greek, available at www.martrans.org)
- Psaraftis, H.N. (2007b) *Public Financing and Charging in EU Seaports: The Case of Greece*, Paper presented at the annual conference of the International Association of Maritime Economists, Athens, July 2007
- Psaraftis, H.N., (2004) Europe port 'patchwork' needs to be redesigned, *Lloyd's List*, 22 January 2004
- Psaraftis, H.N., (2005a) Tariff reform in the port of Piraeus: A practical approach, *Maritime, Economics and Logistics*, No. 7, pp. 365-381
- TRAPIST (2003) WP2: Deliverable on SM Ports Marketing Needs, Editor Gerry Trant, Authors Psaraftis & Schinas
- UK Department of Transport (2001) *Recent developments and prospects at UK container*, <http://www.dft.gov.uk/pgr/shippingports/ports/>
- Vining, A.R., Boardman, A.E. (2008) The Potential Role of Public-Private Partnerships in the Upgrade of Port Infrastructure: Normative and Positive Considerations, *Maritime Policy & Management*, Vol. 35, No 6, p. 551-569
- World Bank (2007) *PPI Data Update note 10*, Public Private Infrastructure Advisory Facility