

# The Assessment of the Piraeus Container Terminal Privatization Initiative

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## ABSTRACT

The geographical advantage of the Piraeus container terminal allows it to enjoy its unique position in containerized trade and global trade. Nonetheless, recently, the administration of the Piraeus port by a Chinese corporation named The China Ocean Shipping Company (COSCO) Pacific has captured the interest of the public and the attention of the media. Via this privatization, drastic changes are anticipated to occur in terms of infrastructure development, employment and logistics. Therefore, these will induce the creation of new trade routes between Greece and Europe, thus, offering a springboard of advantages to the surrounding regions. This paper examines major components that would be affected by above concession. The results suggest that the privatization of the port may lead to the new technology infrastructure improvements, as well as more efficient container capacity within the Piraeus Container Terminal.

**Keywords:** Piraeus, Seaport, Terminal Privatization, COSCO, Greece

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# 1. Introduction

Recently, the administration of the Piraeus port by a Chinese corporation named COSCO Pacific has captured the interest of the public and the attention of the media, since this is one of the initial major direct investments within the European Union made by a Chinese company. COSCO offered 280.5 million Euros to acquire 51% stake of the Piraeus port authority in the first stage of the transaction, whereas in the second stage an additional 88 million Euros was deposited to obtain the additional 16% stake in the port (Institution of Economic and Industrial Research, 2016). Under the circumstance of unemployment and economic stagnation, the tools which are available for new economic policies set by the Greek government are limited. Therefore, for the country's economy to reach significant levels of growth, fundamental reforms and other measures such as the utilization of public property play a critical role in the attraction of foreign direct investment (Institution of Economic and Industrial Research, 2016). In particular, the improvement of infrastructure within the port is expected to generate additional economic activities and benefits for surrounding regions. The changes mentioned above and alternations in the budgetary conditions of the nation, investments and economic activity of the Piraeus port will influence and shape the Greek economy as a whole.

The amount of literature which covers the situation of the Piraeus port before the privatization is rich, comprising of studies such as the one of Pagoulatos (2005), analysing the situation of the port based on a political approach. Further, Pallis (2011) explored the privatization of Greek ports in general. The most recent paper which assesses the privatization of the Piraeus container terminal is the one of Putten (2014) despite that, he discovered the effects of the privatization in Chinese-EU relationships and the Dutch economy. Hence, a gap in aforementioned research identified the need for a study which focuses both in the pre-privatized model of Piraeus as well as in its future effects.

This paper aims to highlight, analyze, and assess the trend of concession and the privatization of the Piraeus port and its competitiveness in the years to come. Accordingly, a critical analysis is conducted regarding its past and present via the rigorous interviews. Furthermore, an outlook of the Piraeus port will be investigated where it is believed that privatizations and concessions may be going to be a common phenomenon in the future.

## 2. Literature review

### 2.1 *The impacts of privatization in seaports*

There are various views on privatization, and there are many port assets that have the potential to be privatized. A large number of studies provided results suggesting that privatization may result in improved performance over public-sector operations (Berg and Shirely, 1989). More specifically, a report published in 1992 and prepared

by the World Bank examined 12 divestitures of state-owned enterprises within four different nations, and offered proof of privatization's benefits. Consequently, taking into consideration that privatization strengthens the operational performance of a port, the World Bank has started conditioning the loans. It makes available through its Public Enterprise Loans program on a developing country, and divests to the public sector of its ports. A recent example is the loans for Venezuela and Colombia which presently contain such a condition (Berg and Shirley, 1989). Further, privatizing ports has been motivated primarily by the expected economic benefit to be derived from the improved performance and efficiency and to reduce the government's long term financial and administrative responsibility for what is considered as a capital intensive business to support. Main motives for port privatization comprise of the promotion of popular capitalism through a wider share of ownership, the reduction of the power of public sector unions, the short-term rise of revenue and ultimately, to resolve difficulties in the relationship which exist between nationalized industries and the government (Cullinane and Song, 2002; Brittan, 1986).

In conclusion, port privatization may have a positive impact on port efficiency by the type of operation. Concerning effectiveness, while not definitive, Pagano et al. (2013) noted a tendency for privatized ports to be more effective than publicly run operations. Similarly, Pallis and Vaggelas (2017) found the evolution of the container ports market in Greece, recording the increased market concentration that followed the concession of the Piraeus port. Furthermore, the different trends (as regards throughput, investments, and commercial relations) were observed in the case of the privately operated container port. In addition, port privatization has positive effects on governments' balance sheets in the short term (Chen et al., 2017).

## *2.2 Characteristics of seaport privatization*

There are a number of questions about why a public port should be privatized, what the key issues to consider in developing a "transaction model" are and what the post-transaction issues and risks are.

James (2014) suggested useful insight on why a port should be privatized. Consequently, he highlighted that advantage of private ownership over the public ownership may reply on the types of governments and ports. Similarly, Panayides (2015) argued that the privatization of the port of Cyprus could generate multiple and multidimensional benefits for the country. Also, he noted that the privatization would overcome challenges, while it would exploit opportunities which may be presented in the future.

There are numerous recorded efforts in reducing the public character of ports in a theoretical and practical level, aiming at covering political, economical and social needs. These goals may not seem reachable as long as port operations remain in the control of the government. Commonly, the efforts of privatization aim to improve the terminal operation. Secondly, they attempt to reduce the economic burden by utilizing funds from private companies. Last, but not least, another aim is that they make efforts in enhancing service quality which are provided to port users and simultaneously lowering price (Beech, 2004).

Besides, the government's indirect goals pursue the redistribution of wealth towards societal groups which are less privileged compared to others, and making the port more efficient and attractive, which translates to an increase of vessels calling at the port. The initiative of the private sector may boost privately orientated initiatives of the nation's economy. Additionally, by introducing new technologies and modern management systems which will be incorporated within port operations would be necessary so as to improve the efficiency (Pardali and Michalopoulos, 2008).

### 3. Methodology

The most appropriate study that clarifies the understanding of this research problem might be an exploratory study which seeks new insights, asks questions, and assesses phenomena in a new light and perspective (Robson, 2002). Specifically, exploratory research is characterized by the search of literature and by conducting interviews with "experts" within the field of interest. In this case, these include stakeholders of the Piraeus port, political figures and other employees that hold management positions and are related to the port management and operation either directly or indirectly. Ultimately, the possibilities which may lead to the alteration of the direction of the questions due to the appearance of new data are relevantly high (Saunders et al, 2009, p. 139).

The primary data were obtained through twelve interviews. These interviews were drawn from individuals who have expertise in transport and maritime sector. The salient features which supported the reliability of the research findings, was the large sample of interviewees and the format of the interview questions. On the other hand, a weakest feature was the lack of secondary data relating to regional impacts of the Piraeus container terminal after the concession. Thus, the results of the study can be constructed as adequate regarding their quality.

The type of interviews were semi-structured interviews. The principal characteristics of the semi-structured interviews used are that the interviewer and respondents engage in a formal interview (RWJF, 2008). The reasons why semi-structured interviews were chosen is because semi-structured interviewing, according to RWJF (1988), is best used when there is only one chance to interview a participant, and when several interviews are sent into the field to collect data. In addition, semi-structured interviews are preceded by observation, unstructured and informal interviewing in order to develop keen understanding around the topic which is fundamental for developing meaningful and relevant semi-structured questions. Also, adding open-ended interview questions may stray from the interview guide. Nonetheless, it still offers the opportunity to identify alternative ways of viewing and comprehending the topic which is at hand (Cohen and Carbtree, 2006).

Specifically, this paper is based on a comparative design, which is concerned with the study of two or more cases. This specific design advocates that social phenomena are better understood when they are compared in two or more meaningful cases. Consequently, the individual characteristics of each case separately result in constructing a springboard for theoretical reflections about findings. Furthermore, the com-

parative design involves more than one case, which can be viewed as a multiple case study design, however, when following the comparative method, it mainly focuses on the specific context of each individual case and less with the ways in which the cases will be compared (Bell and Bryman, 2011).

This paper aims to determine the effects of the privatization of the Piraeus port, by assessing its effects on container throughput and underpinning its impacts on the surrounding regions. Therefore, the following data were drawn from container-ship companies, employees operating in the port, individuals involved in politics, import and export companies and drydocking yard managers situated in the Piraeus area. The following 12 participants have responded to face to face interviews which mainly consist of eight open ended questions.

**Table 1.** Participants' profile

Participants	Demographic characteristics
A	Drydocking yard manager in Piraeus
B	Drydocking yard manager in Piraeus
C	Containership owner
D	Piraeus port employee (initially against privatisation)
E	Import/export company in Piraeus
F	Shipowner
G	Containership owner
H	Containership company managing director
I	Containership company owner
J	Former Greek finance minister
K	Former minister of employment and social protection
L	Shipowner

## 4. Results and Findings

### 4.1 Impact of the public sector in the strategic model of the Piraeus port

**Question No.1:** *The Piraeus port despite its strategic location in the cross-roads of 3 continents was not able to take advantage in the past the increased container traffic compared to other ports in the Mediterranean Region. Do you believe that this was due to the strong involvement of the public sector in its strategic model? And if yes, why?*

Although question number 1 may seem vague and general in nature, it is intended to record how the involvement of the public sector affects the traffic of the port in the previous years. All participants argue about the flawed management of the public sector and its negative presence in the port. More specifically, this resulted

in the absence of infrastructure innovation within the port. Hence, clients (i. e. shipping lines) considered the port unattractive.

Further, one of participants highlights the low productivity of the government's management that lacked in terms of monitoring results and feedback. Therefore, incentives for better performance were not provided to employees. Additionally, another respondent argues about the scarcity of funds furnished by the Hellenic government which consequently resulted in the lack of infrastructure investments. Thus, the port could not be competitive. What is more, four out of twelve participants stress that the firm presence of labour unions was one major contributing factor to the inefficiency of the port. Specifically, regular strikes harmed the reputation of the port. Therefore, shipping lines avoided calling to the port with large vessels and utilized feeder vessels provided by third-party operators.

Overall, the main reasons which the port was not able to attract container traffic in the past are the lack of funds for infrastructure, and the regular strikes which occurred by the port syndicates. However, the predominant factor on which all participants agree on, is the strong involvement of the government which led to delayed decision making due to the extensive bureaucracy.

#### *4.2 The influence of the private sector in the Piraeus port*

**Question No2:** *Do you believe that the strong participation of the private sector (the involvement of COSCO) will help the generation of benefits such as increasing the efficiency of operations and quality of the port?*

In reply to question 2, three out of twelve participants, believe that COSCO will boost the efficiency of the port by conducting infrastructure developments. Hence, it is expected that infrastructure improvements will minimize the amount of time of loading and discharging operations. and, therefore, this will significantly augment the profitability equation of shipping companies.

Due to the expertise of COSCO in managing other subsidiaries, it will be able to improve operational deficiencies that currently suffer. In addition, participant C in order to highlight the importance of private sector investment makes a comparison between the privatized ports and ports that are still under public management and projects. He strongly argued that there will be no growth in the future, if it continues to remain under the control of the government. Furthermore, four out of twelve participants argued that COSCO would improve the efficiency of the port by providing funds from its worldwide reach. Additionally, one out of twelve participants argued that the more port infrastructure constructed the more tax revenues for the Greek government.

##### *4.2.1 Achieving competitive advantage: A shortcut to the European markets*

**Question No3:** *Will the Piraeus port gain a competitive advantage in the Mediterranean region due to its privatized-liberalized model?*

In reply to this question, three out of twelve participants stated that the Piraeus port is at a quite important location in the Mediterranean region. However, despite its salient location, other factors would determine its competitive advantage within the Mediterranean area. In particular, twelve out of twelve participants believed that the privatization would have a positive impact on three main components. Firstly, increased investments on port infrastructure would increase the port's operating efficiency. Secondly, there would be cost-effective incentives for shipowning companies that would get a benefit from the economies of scale of the port. Last but not least, the development of infrastructure is expected to create more labour positions.

Regarding its competitiveness, the port relies on its strategic location, which is situated very close to the Suez Canal and the Black sea than any other countries. However, two out of twelve participants argued that hinterland connections must be made to stable countries such as European ones and Russian. Further, its strategic location would enable the faster arrival of containers to the surrounding ports, achieving lower transportation costs. All in all, it is predicted that the management of the port would be more efficient, because there will be less political intervention and union influence.

#### 4.2.2 Attraction of international logistics companies in the region

**Question No 4:** *In your opinion, will the privatization of the port provide access to new markets and products and attract more international firms in Greece?*

The respondents considered that the port would attract international firms for a variety of reasons. First, two out of twelve participants stated that the main reason for which multinational companies would be attracted to the Piraeus port is because it provides easier access to the European markets. Therefore, international companies would develop their logistics and distribution departments in the Greek region transforming Greece into the connecting point between Asia and the rest of Europe. Supply and demand imbalance, and cost cutting must be taken into consideration. Specifically, if the port increases its efficiency, then it will become more competitive, attracting more customers from around the world. To achieve it, eight out of twelve participants stated that railways must be upgraded to achieve the quick transportation of goods in Europe. One out of twelve participants highlighted that if adequate railway infrastructure is constructed, the transport duration from China to Europe will be shorten to approximately 10-12 days. Consequently, this is more attractive than utilizing containerships that transverse the Mediterranean Sea and then arrive at major ports such as Antwerp. Last but not least, the port efficiency is not the only factor that must be taken into consideration when discussing the attraction of international companies in the port region. Hence, bureaucracy must be minimized in order to make it easier for these companies to be established.

#### 4.3 Piraeus port vs. Mediterranean ports - cargo volume competition

**Question No 5:** *Will the rising traffic of cargo volumes in the port boost the need*

*for infrastructure developments in other ports within the Mediterranean region?*

It is speculated that ports in the Mediterranean region would undergo infrastructure developments for two reasons. Either because they wish to be more competitive compared to the Piraeus port, or because Piraeus would not be able to handle the excessive demand. Further, infrastructure developments would take place in Mediterranean ports in a game-theoretical context. Particularly, if the port manages to maintain high container loading/unloading rates, then other ports would undergo infrastructure developments to preserve their competitive position. This effect would take place to the ports closer to Piraeus primarily, and then spread to other ports farther from it. Moreover, taking into consideration competition peripheral roads must be made to avoid congestion.

#### *4.4 Combination of Greek and Chinese management practices*

**Question No. 6:** *In your opinion, will the cooperation between the Chinese government and the Greek government transfer positive management expertise in the operation procedures within the Piraeus port?*

Nine out of twelve participants believe that positive expertise will be transferred through this privatisation. Further, one must bear in mind the well structured and efficient management of COSCO which has specialized throughout the decades in evolving large infrastructure companies. However, there is a thin line between the management of COSCO and the operation of labour workers, and that must be taken into account in order to avoid future strikes. In addition, because of the higher volumes of TEUs handled by the port, the Piraeus port would be able to generate more income for the Greek government, which translates to additional job opportunities for citizens in the region. Overall, the combination of three out of twelve respondents believed that the combination of expertise between the Greeks and COSCO would ensure that operational procedures are run smoother, and port syndicates will not go on strikes as much as in the past.

**Question No. 7:** *Do you believe that the management of the port will be improved and enhanced due to the sharing of managerial and operational knowledge between the Greek Government and the Chinese company COSCO?*

Eight of twelve participants believe that the combination of expertise will result to a good managerial model. Specifically, COSCO will aid the port by providing administrative expertise, while Greeks will offer their knowledge on the regional/local mentality. On the other hand, two out of twelve participants argue that COSCO will be doing things mostly on its own, and therefore there will be no combination/sharing of knowledge and management expertise.



#### 4.5 Drydocking yards - potential for investments and larger ships

**Question No 8:** *To what extent will such an investment effect the already existing drydocking yards in the surrounding region and will it boost the need for the construction of new ones built by COSCO?*

COSCO's corporate investment plan combined with Greek ship repair and drydocking experience is expected to have positive effects. Specifically, COSCO operates numerous drydocking facilities in East Asia, and therefore it would benefit from having a reach on the West side of the globe. Also, due to the expansion of the container terminal and the upsize of container vessels, drydocking yard that are capable of accommodating larger vessels will be required. Having a larger container terminal will create incentives for larger vessels (e.g. Post-Panamax) to approach the port.

## 5. Discussion

### 5.1 The influence of the public sector on the Piraeus container terminal

The findings suggest that the public model of the Piraeus port in majority has had a negative impact on its operating efficiency and management. Specifically, the high involvement of the government in its pre-privatized model resulted to unnecessary bureaucracy, causing late decision making regarding infrastructure innovation and expansion. What is more, in combination with the scarcity of results monitoring, funds, and inconsistent policies the performance of the port was low. Hence, liner companies did not wish to call large vessels and chose to utilize smaller feeder vessels from third party operators. In the past, the Piraeus container terminal operated as a public service port. A port authority performed the whole range of the services related to the port and owned all the infrastructure. Yet, throughout the years, because of the inefficiencies they are related to, the presence of public ports has declined significantly (Rodrigue, 2016). In addition, despite the strategic geographical location of Piraeus in the crossroads of the Far East-West Europe and West-Europe-Black Sea routes, it did not manage to take advantage of the traffic increase in the Mediterranean. The principal reason behind this was that Greek ports operated strictly under the control of the public sector. Taking into account the fierce competition within the Mediterranean regions, other countries (e.g. Italy) moved on a more liberalized port model which included the development of specialized terminals (e.g. Voltri and Gioia Tauro Terminal).

Thus, the question which arose was whether Greece should proceed to a new reform in the port industry. Based on the preceding conclusions, the effects are anticipated to be rather positive. In the study of Pallis and Syriopoulos (2007), an evaluation was made on the Greek port reform, by analysing the financial condition of 12 ports which are limited companies. They noted that there was pressing need for port reforms. Likewise, Psaraftis (2007) pointed out that the benefits of port reforms in Greece would be significant. Pallis and Vaggelas (2005) found that the

vast majority of the port's CEOs were in favour of directive proposals, and they were seeking the involvement of private companies in the provision of port services. They argued that the participation of private companies would boost the service quality of the port, and simultaneously decrease tariffs.

## *5.2 Increased port efficiency through a privatized model*

### *5.2.1 Port attractiveness*

The attractiveness of a container terminal to shippers is of paramount importance to its success. Specifically, ports gain their economic relevance at both local and national levels, as they become logistical nodal points in a globalized market. So far, ports have induced the generation of employment with the attraction of industrial activities around them, hence boosting the regional economy. Further, the seaport can be regarded as a hub. It attracts firms that perform different but complementary activities, and consequently port clusters are created. In addition, the evolution of individual companies mainly depends on the evolution of the clusters from a micro-geographical perspective, so it is worthwhile considering the factors which affect the development of the cluster. What is more, there is a strong negative relationship between transport costs and trade volume, as well as between the cost level and the availability of port infrastructure. According to Sanchez et al. (2003), the lower the transport costs is, the higher become the foreign investment and service export levels and the chances for a country to have access to technology.

### *5.2.2 Transferring port operations to the private sector*

The changes which take place within the port sector present numerous challenges to port administrators, terminal operators, and other service providers. On the other hand, these changes present opportunities fostering new ways of doing business and provide potential entrances with opportunities of entry throughout the range of port services and activities. Overall, 220 privatizations occurred from 1992 to 2004, and generated private investments which exceeded 21\$ billion to upgrade terminals and to renew superstructure (The World Bank, 2016).

### *5.2.3 Outcomes from previous privatizations*

To achieve an effective privatization, transparency and open competition through a structured international tendering process must be granted. The number of privatizations that have not been completed due to legal challenges is great. Therefore, in order to minimize legal challenges and conflicts, the role of the port administration after the privatization and any limits on the contractor's ability to operate should be stated within the bill package (The World Bank, 2016).

### *5.2.4 Potential outcomes from the privatization of Piraeus*

To begin with, due to COSCO involvement, the container terminal of Piraeus is the fastest growing port. Specifically, COSCO aims to transform Piraeus into an important hub for transshipment containers in the Mediterranean and a major dis-

tribution center for East, Central and South-East Europe, including the region of the Black Sea. In respect of the distribution further than Greece, a significant factor is the ability of COSCO to attract multinational companies such as Samsung and ZTE. Ultimately, the implications for Piraeus's gateway function could be important; however, this process is still at early stages (Putten, 2014). Further, the Greek economy would be strengthened as well as the trade of goods between China and Greece, but also there is high potential for increasing the inflow of counterfeit or other undeclared goods. Additionally, COSCO Pacific is a listed company in the Hong Kong stock exchange but is principally controlled by the Chinese Communist Party. Therefore, Greece may benefit from preferential financial and diplomatic support by the Chinese government. Hence, these features deem COSCO as an attractive partner for the Greek government and for the business partners of COSCO in Piraeus (Putten, 2014).

## 6. Conclusion

This paper aimed to identify the impacts of the privatization of the Piraeus container Terminal, as well as its effects on regions. Substantial changes are likely to occur within the Piraeus region after the privatization of the container terminal. The future effects of the concession agreement were investigated, taking into account its effects on the managerial model of Piraeus, and on the development of infrastructure. Specifically, this paper investigated the aspects of the pre-privatized model of the container terminal, as well as the development of the port after the privatisation. Also, it assessed the potential for the attraction of relevant logistics companies within the region of the port.

The research findings are of important gravitas, as they are able to state the potential impacts of the privatization of the Piraeus container terminal, as well as the core reasons which made it inefficient, and uncompetitive in the past. As it has been mentioned previously in the literature review, ports are able to benefit in multiple ways through privatization. This paper provided a different perspective focusing on the regional economic impacts of the container terminal and on whether the combination of Sino-Greek management expertise would be beneficial for both parties. At the moment, there is non-negotiable doubt by the Greek population surrounding the concession. Nonetheless, this research found that the port would upgrade its infrastructure and reform its management model, therefore fuelling the attractiveness of the port towards larger vessels. On the other hand, it is impossible to assess the precise regional impact of the port on employment because it depends on multiple variables.

In the near future the research herein could be broadened by examining whether the Piraeus container terminal will compete with the port of Thessaloniki. However, for future research to be conducted, more data regarding the port's impacts on the regions must be acquired and more reports about the container throughout of the terminal must be released from companies. Further, more research could also focus on how the port will shift the Asia-Europe trade route by halving voyage time through the transshipment of goods from the Piraeus port.

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