COSCO IN GREECE: THE MANAGEMENT OF PIRAEUS PORT FROM 1999 TO 2012

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ABSTRACT

Since ancient times, port sector has been an important factor for the growth of the economy and for the general prosperity of the society. Nowadays, its importance becomes even greater as the world trade has been increasing significantly. Ports need to be equipped with the appropriate infrastructures. The question that has arisen is whether or not publicly owned and operated ports are managed as much efficiently as private operated ports. This study focuses on the Greek case and more specifically on the privatization of Piraeus Port's container terminal.

Undoubtedly, one of the biggest and most widely spoken investments that have been realized over the last years in Greece is that of Cosco Pacific Limited in the port of Piraeus. Its initial budget was greater than € 620 million. At the end of 2008, the concession contract of the biggest Greek port was signed to the aforementioned Chinese company, which is one of the most significant players of the international shipping. Today, exactly five years after this time point and having fulfilled to a great extent the initial business plan, Piraeus is classified as one of the biggest ports in Europe in terms of TEUs. The port has managed to handle four times more TEUs compared to the ones handled in 2008 and thus increasing simultaneously its share of the internationally handled TEUs market.

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COSCO IN GREECE :

THE MANAGEMENT OF PIRAEUS PORT FROM 1999 TO 2012

(Research Paper Publication)

INTRODUCTION

Nowadays ports face ever increasing competition. Ports worldwide pursue effectiveness in order to be competitive. This goal mainly can be achieved by lowering operating costs, increasing productivity and providing high quality services. According to Goss (1990), port competition may be analyzed as follows: 1) competition between whole ranges of ports or coastlines, 2) competition between ports in different countries, 3) competition between individual ports in the same country, 4) possible competition between the operators or providers of facilities within the same port, and 5) competition between different modes of transport. On the other hand, UNCTAD (1993) categorized port competition into inter-port competition, inter-modal transportation competition, and intra-port competition. In addition, Matsbashi (1997) categorized port competition largely into both inter-port competition within a country, and international port competition. This study focuses on the handling of containers in the port of Piraeus that is carried out both by OLP and SEP. The aim is the presentation of their impact on the progress of the biggest Greek port on a domestic, European and international level while special emphasis has been put on the existing competition between East Mediterranean transshipment ports. The interval, which is covered, starts a few years before the arrival of Cosco in the Greek port and comes up to 2012 in order that comparisons can be feasible. Except for the financial magnitudes, emphasis is also laid on the negative and positive consequences that the concession contract of the Tiers 2&3 had on OLP Company, as well as the society. In order to measure the competitiveness among ports, the port output is used. The port output can be simply defined in terms of tones per unit of time passing through: that is the port throughput (Jansson and Shneerson 1982). Thus the port product (output) can be considered as the port throughput (in tones or TEU’s) in a given time period (Jansson and Shneerson, 1982; Talley 1988-1994; Pardali 1997). Chang (1978) argues that the port output should be measured in terms of either total tonnage handled at the port or in gross earnings. Donk-Wook Song (2001) claims that “one possible solution of representing the output of a container terminal may be provided by measuring the throughput in terms of container movements across the quayside (i.e. TEU’s). In this study the port output is defined in terms of TEU (twenty-foot equivalent unit).

I. The chronicle of the concession contract

Until 1999, the port of Piraeus and the one of Thessalonica were organized as state-controlled public law undertakings. As a result, the appointment of port authority was dependent on the state while the port authority was responsible for the infrastructure and superstructure of the port and the provision of all port services. The port proceeds were absorbed by the state and they were not used for the financing of the port investments. The only cooperation with the private sector would take place in the case of capacity and equipment lack.

The first initiatives aiming at giving elements of a private company to the Greek ports took place in 1999 when Piraeus and Thessalonica became corporations. This change did not result in their privatization. However, it led to great changes such as the adoption of corporate governance and the use of business plans as well as their listing on the Athens Stock Exchange.

Greater progress was made two years after the signature of the concession contract between each of the corporate ports and the Greek State. Based on it, the infrastructure as well as the major part of the superstructure belonged to the State. However, each corporate port was recognized as an exclusive entity that could use and utilize the port's facilities, under prescribed terms and obligations, including the payment of a yearly concession fee. Thus, the aforementioned contract marked a new era that would give the opportunity for the leasing of the port spaces and facilities to private port operators.

Signature of the concession contract

Actions aiming at the fulfillment of this goal were made in 2004. In this year, the Government being the major shareholder of the Piraeus Port and through the Ministry of Merchant Marine, started discussions with a great number of terminal operating companies (Cosco Pacific, HPH, DP World, APM Terminals, MSC, and ZIM) and governments (China, Korea). The initial plan was to offer Pier I but it did not succeed since OLP received a 35 million euro loan from the European Investment Bank to further expand Pier I.

Nevertheless, the aforementioned actions indicated that the Government was well positioned to transfer the entire container port of Piraeus to Cosco Pacific Limited. This company had expressed openly its interest to develop Piraeus as the major transshipment hub in Mediterranean Sea. However, the strikes of port unions in the port of Piraeus as well as the European legislation which limited the direct negotiations with only one candidate led to the abandonment of this procedure.

The different procedure that was followed in order to overcome these problems was the international tender, which took place in January 2007 and concerned the concession of the Tier 2 and the future Tier 3. The acceptance of the tender was in favor of «Cosco Pacific Limited».

Aiming at the handling of the two piers, Piraeus Container Terminal A.C (PCT A.C) was established in November 2008 having its headquarters in Piraeus and being a subsidiary of «COSCO Pacific Limited», which is one of the largest handling terminal hub companies internationally. After fifteen days, the signature of the concession contract between PCT A.C and OLP A.C took place. The above-mentioned contract referred to the concession of the existing still operating Tier 2 for the development, operation and commercial utilization as well as the land space for the construction and the commercial utilization of the Tier 3. OLP A.C retained the operation of the Tier 1, which is referred as S.EMPO (it means Container Terminal). The concession contract duration was 35 years during which PCT A.C ought to aim at the increase of the capacity in terms of ships and containers handling. The activity of the company started a year after its establishment and specifically, in October 2009, while the Tier 3 opened in June 2013.

II. Container handling

Cosco is operating in the Piraeus Port for five years (since 2009) enhancing continuously its magnitudes. Since then, the development of the largest Greek port is fairly connected to the growth of PCT. OLP is also developing, but its pace of growth cannot be compared to the one of PCT. There was a 63.6% increase in the number of containers handled in the Piraeus port in 2012 compared to 2011. More specifically, in 2012, 2,735 million TEUs were handled while 13% of this increase is attributed to S.EMPO and 87% to PCT. In the same period, PCT increased its turnover by 43.13%, reaching €104.3 million.

At this point, it is significant to point out the difference in the capacity of the two Tiers that were handled by the two companies in 2012. S.EMPO had a capacity of 1 million TEUs utilizing 60% of it while PCT had a capacity of 2.6 million TEUs utilizing 80% of it. At the same time, the global utilization percentage was about 67%.

Table 1.1 Container Handling 2002-2012

TEUs*	S.EMPO	P.C.T	TOTAL
2002	1,404,939	-	1,404,939
2003	1,605,135	-	1,605,135
2004	1,541,563	-	1,541,563
2005	1,394,512	-	1,394,512
2006	1,403,408	-	1,403,408
2007	1,373,138	-	1,373,138
**2008	433,582	-	433,582
***2009	664,895	NA	664,895
2010	513,319	684,000	1,197,319
2011	490,904	1,180,000	1,670,904
2012	625,914	2,109,000	2,734,914

* TEUs : Twenty feet equivalent unit (unit volume equivalent to 20 * 8 * 8 feet)
** In 25/11/2008 OLP A.C. signed a contract with Cosco Pacific Limited giving it the exclusive right to use and exploit the S.EMPO
*** P.C.T. started its operations on 1st October 2009
NA: Not Available
Source: Port of Piraeus SA, market estimations.

In 2011, S.EMPO experienced a 4.37% decrease in the handled containers, while PCT surged by 72.51%. In 2012, there was growth, which concerned both the PCT (78.53%) and S.EMPO (27.5%). Moreover, comparing the years 2004 and 2012, a 70.3% increase in the number of handled containers is noted which is mainly explained by the three-year operation of PCT in Piraeus. Despite the economic recession, the total increase of containers in the Piraeus port after 2009 can be attributed mainly to:

- · The realization of investments which cost €340 million and made the Piraeus port one of the most modern and competitive ports in Europe. This achievement attracted new companies.
- · The ambition of Cosco to make the Piraeus port the center of Mediterranean leading its ships and cargos towards it.
- · The recovery of the lost credibility and fame of the port due to the concession of the Tier 2 to Cosco. A representative example is the return of Mediterranean Shipping Company, the second largest container handling company in the world, as well as of Evergreen back to Piraeus port to do business. This happened due to the smoothing of the situation and the arrival of Cosco in Piraeus. It is clarified that the Mediterranean Shipping Company had transferred its activities from Piraeus to Gioia Tauro in South Italy when the strikes of the port unions started in the port.

Clause related to the number of handled containers

According to the concession contract of Tier 2 and 3, the gradual development of investment on Tiers 2 and 3 should increase their capacity. More specifically, PCT should reach the levels of capacity that are written in the second column of the table. PCT ought to secure handling of a number of containers, which on a minimum level equals to 65% of the guaranteed capacity. The guaranteed capacity of each year, as well as the real numbers of handled containers is presented below.

Table 1.2 Guaranteed and Actual Capacity

Year	Guaranteed Capacity	Actual Capacity	65% G.C.	Difference
2010	700,000	684,000	455,000	229,000
2011	700,000	1,180,000	455,000	725,000
2012	1,400,000	2,109,000	910,000	1,199,000
2013	1,700,000	-	1,105,000	-
2014	2,000,000	-	1,300,000	-
2015	2,750,000	-	1,787,500	-
2016	3,700,000	-	2,405,000	-

G.C. = Guaranteed Capacity, Units: Teus.
Source: L. 3755/09, Port of Piraeus SA.

In the first year of the PCT operation, not only did it achieve 65% of the guaranteed capacity but also it over-covered it. More specifically, in 2010 the guaranteed capacity was over-covered by 229 thousands TEUs, in 2011 by 725.000 TEUs and in 2012 by 1.199 million TEUs. These results depict its growth. It is clarified that the gradual development of the investments of Northern SEMPO has to be realized in a way that the guaranteed capacity is engaged annually. Penal clause is imposed on PCT in case that it disobeys this condition.

III. OLP and PCT turnover

The financial magnitudes of PCT indicated an increase from 2009 reaching a peak in 2012. The rate of revenues growth was close to 16.1% in 2011 and 43.13% in 2012. On the other hand, OLP revenues either increased or decreased. The most characteristic decrease of its turnover was in 2008 when they were reduced by 32% and were about €116 million. This fact could be attributed mainly to the long strikes in the port during that period which aimed at the prevention of the port concession to Cosco. Another reason was the decline of world trade. This specific fact affected directly the OLP revenues that came from the handling of Tier 1 (OLP 2). Those revenues were reduced by € 57.6 million in 2008. In 2009, the OLP revenues slightly increased contrary to 2010 and 2011, when they became smaller and smaller. The main factors seemed to be the loss of clients of S.EMPO in favor of the Tier 2 and the non-operation of Tier 1 during the first five months of 2010 (in comparison to three months in 2009). In 2012, revenues increased by 11.2%. However, they did not manage to get even close to the ones of 2008 and 2009, which indicated the negative impact of the OLP's alienation from its clientele for eight months.

Table 1.3 Revenue 2005-2012 OLP & PCT

In EUR	2005	2006	2007	2008	2009**	2010	2011	2012
O.L.P	139,978,021.68	144,137,187.25	171,354,851.74	116,038,393.45	128,483,428.41	116,720,753.69	105,127,688.49	106,592,452.79
P.C.T[2]	109,184,444.03	110,049,186.06	130,926,114.89	73,289,865.91	83,495,892.70	69,928,185.41	58,049,221.90	64,562,220.00
P.C.T	-	-	-	-	16.611.708,34*	62,752,194.30	72,870,325.76	104,300,990.75

* Covers the period from 10/11/2008 until 31/12/2009, PCT[2]: Revenue of PCT without the various port services (e.g. revenue from passenger ships).

** In 2009 PCT started its operation in Piraeus Port.

Source: Port of Piraeus SA, Piraeus Container Terminal SA.

IV. Piraeus and the competition in national and international level

Piraeus at National Level

Over the years the port of Piraeus demonstrates greater capacity compared to the port of Thessalonica. The following table shows the containers (in TEUs) that were handled by the country's two largest commercial ports from 2008 until 2012.

Table 1.4 Piraeus - Thessalonica Container Ports Market Share

	Piraeus	Thessalonica	Total
TEUS 2008	433	239	672
Market share	64.43%	35.57%	100%
TEUS 2009	665	270	935
Market share	71.12%	28.88%	100%
TEUS 2010	1,197	273	1,470
Market share	81.43%	18.57%	100%
TEUS 2011	1,671	302	1,973
Market share	84.69%	15.31%	100%
TEUS 2012	2,734	320	3,054
Market share	89.52%	10.48%	100%

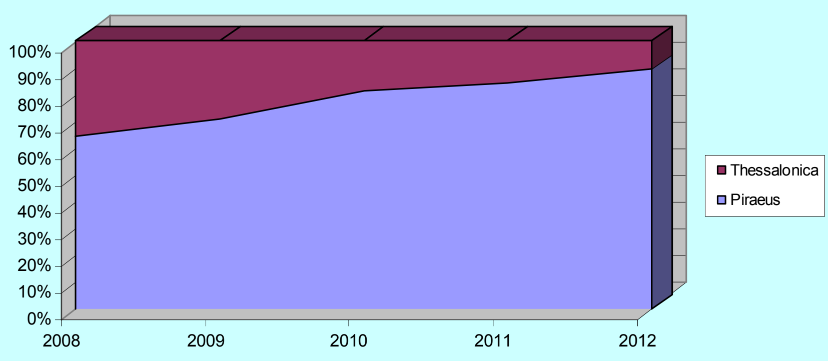
UNIT: X 1000 TEU

Source: World Bank, AUEBS IFC estimation.

The presence of the Chinese company became evident after 2010 with a sharp increase in the number of the handled containers, 1,197,000 TEUs in 2010 compared to 665,000 TEUs in 2009. At the same time, despite the fact that the port of Thessalonica also appeared to grow with 320,000 containers handled in 2012, this number constituted only the 11.7% of the corresponding sizes in Piraeus.

The domestic market share for the port of Piraeus in 2008 was as high as 64.43%, while in 2012 it reached about 90%. The increase in the domestic market share from 2008 onwards is shown in the following diagram.

Diagram 1.1 Domestic Market Shares 2008 - 2012



Notable Greek ports that can compete to some extend with the one of Piraeus are: a) the port of Astakos with capacity of 850,000 TEUs and b) the port of

Heraklion in Crete which due to its shallow depth (8.5 meters) cannot serve large ships.

Piraeus at European and International Level

In 2012, Piraeus is ranked for the first time among the 10 largest commercial ports in Europe with a total container throughput reaching the 2.73 million TEUs, when the corresponding figure in 2010 was 1.19 million TEUs, which consisted a growth of 128.4%. Since 2011, the number of containers has soared by 63.7% constituting the largest increase among the EU ports and by taking into consideration the low growth of international trade due to the ongoing recession. Especially in the European Mediterranean, this increase became even more significant and could be attributed to two main reasons. Firstly, the investments made by Cosco Pacific Ltd contributed to the upgrading of the port of Piraeus. Secondly, the development of container transportation and in particular transportation between Europe and Asia contributed as well to the growth. Although the biggest portion of this kind of trade relations belonged to the Asian ports, the European ports also seemed to benefit managing 114,000,000 TEUs over 23,700,000 TEUs in 1990. In particular, the Mediterranean ports continued to manage 9% of international container transportation by gaining share from the ports of Northern Europe and thereby demonstrating their importance as transshipment stations. More favored by this situation seemed to be the Egyptian and Turkish ports, while the Greek ones have only recently benefited from the increase in European-Asian trade relations. Specifically, they gained 4% of Mediterranean container throughput and thus increased their share over 2008-2010.

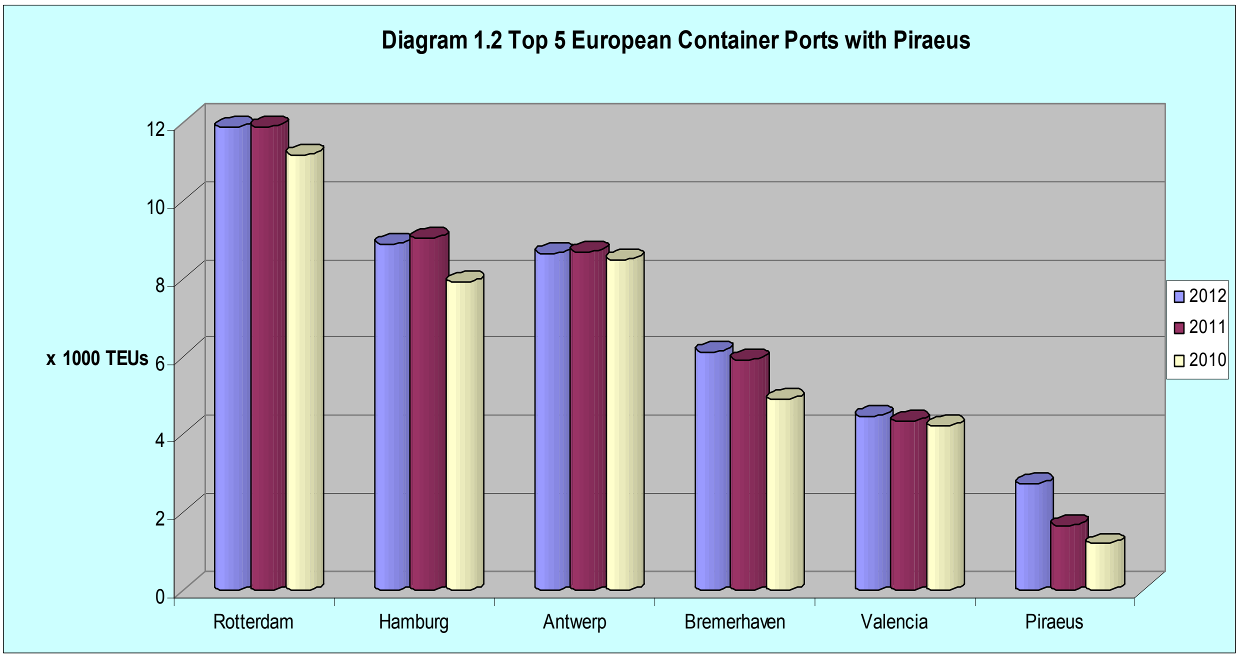
Table 1.5 Top 10 European Container Ports 2010 - 2012

A/A	Port	Country	2010		2011		2012	
1	Rotterdam	Netherlands	11,148	12.89%	11,877	12.82%	11,866	12.46%
2	Hamburg	Germany	7,896	9.13%	9,014	9.73%	8,864	9.31%
3	Antwerp	Belgium	8,468	9.79%	8,664	9.35%	8,635	9.07%
4	Bremerhaven	Germany	4,888	5.65%	5,916	6.38%	6,115	6.42%
5	Valencia	Spain	4,207	4.86%	4,327	4.67%	447	4.69%
6	Algeciras	Spain	2,810	3.25%	3,602	3.89%	4,071	4.28%
7	Felixstowe	United Kingdom	3,416	3.95%	3,249	3.51%	3,327	3.49%
8	Piraeus	Greece	1,197	1.38%	1,670	1.80%	2,734	2.87%
9	Gioia Tauro	Italy	2,852	3.30%	2,305	2.49%	2,721	2.86%
10	Ambarli	Turkey	2,540	2.94%	2,686	2.90%	2,600	2.73%

Unit: Number x 1000 TEU (Twenty-Feet Equivalent Units).

Source: Port of Rotterdam, Port of Piraeus, Port Technology International.

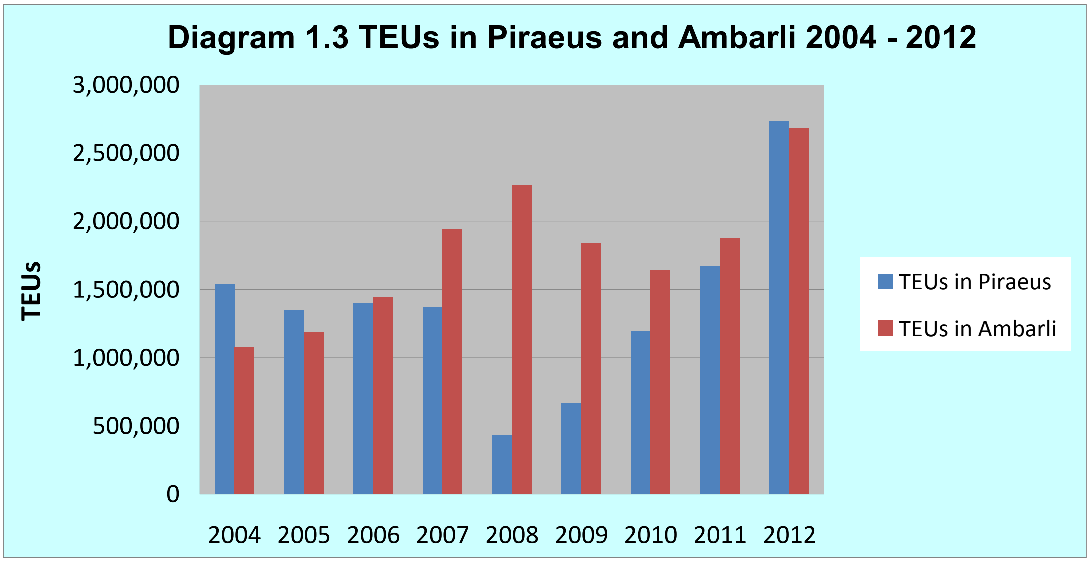
Note that despite of the aforementioned facts, the ports of northern Europe continued to have a leading role. To be more specific, in 2012, the port of Rotterdam kept its title of being the largest port in Europe handling 11,866,000 TEUs versus 11,877,000 TEUs in 2011. The port of Hamburg came in the second place with a decrease of 1.66%, while Piraeus took the 8th place. The chart below shows the number of containers handled by the five largest European ports during 2010-2012, compared to Piraeus.



As for the future, the prospects are just as promising. According to the concession agreement of Pier 2 and 3, Cosco Pacific Ltd has to increase its capacity to 3.7 million TEUs by 2016, while according to the budgeted figures, it is expected that the Piers 2 and 3 are going to handle approximately 3.1 million TEUs by 2043 (end of contract), making the port of Piraeus even more competitive.

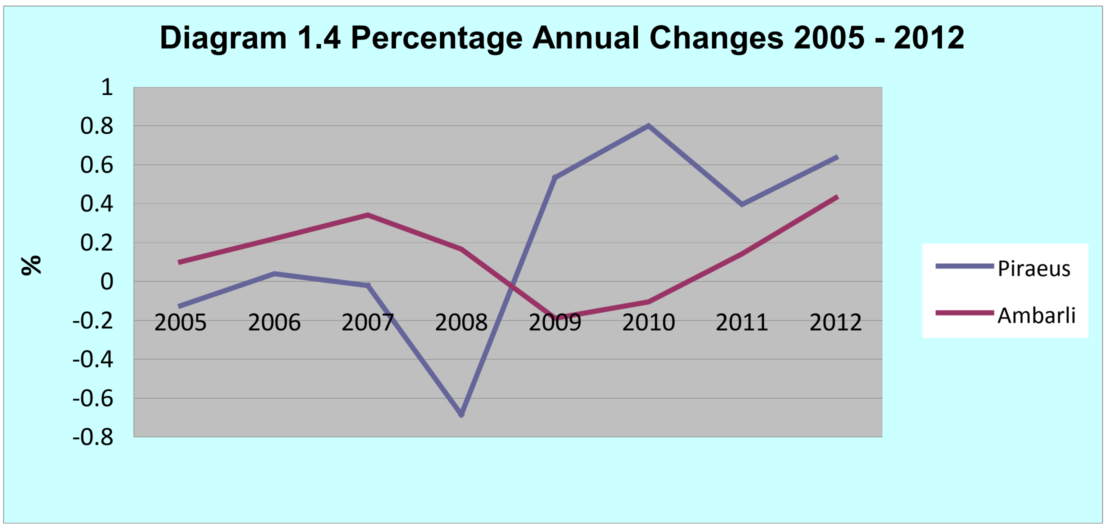
The total capacity of the port of Piraeus is expected to reach 4.8 million TEUs. The main contributor to verify these expectations is the strategic location of Piraeus, which was hardly exploited in the past. More specifically, the port is situated at the crossroads of three continents (Europe, Africa, Asia) as well as at the point of crossing of the sea routes that link the Mediterranean with Northern Europe.

However, given the direct competition, which is becoming stronger and stronger between Piraeus and the ports of the eastern Mediterranean the focus of this research report is directed further on the latter. As far as Turkey is concerned, its container ports have obtained significant profits since 2011 when the recovery in Asian trade was signaled. This fact is verified by the diagram below which depicts the handling of containers in the port of Ambarli, which is the largest port in Turkey in terms of container management.



However, focusing on past data, it is observed that Ambarli has grown steadily since 2004, a growth which stopped in 2009 because of the crisis of international trade and continued as aforesaid from 2011 onwards. Nevertheless, amid the crisis, it manages more containers compared to Piraeus, which could perhaps be attributed to the port's location since it is a key transfer station to the ports of Black Sea. The only exception was the year 2012 when Piraeus managed to surpass Ambarli in TEUs.

Other than the absolute sizes, the study of the annual percentage changes in the number of TEUs at the two ports shown below also generates interest. It is revealed that from 2008 onwards, when Cosco Pacific Ltd took over the management of Pier 2 and 3 of Piraeus, the growth was exponential. Although it was reduced to lower levels during the next years due to the adverse economic environment, it still remained much higher than the one of the port of Ambarli.

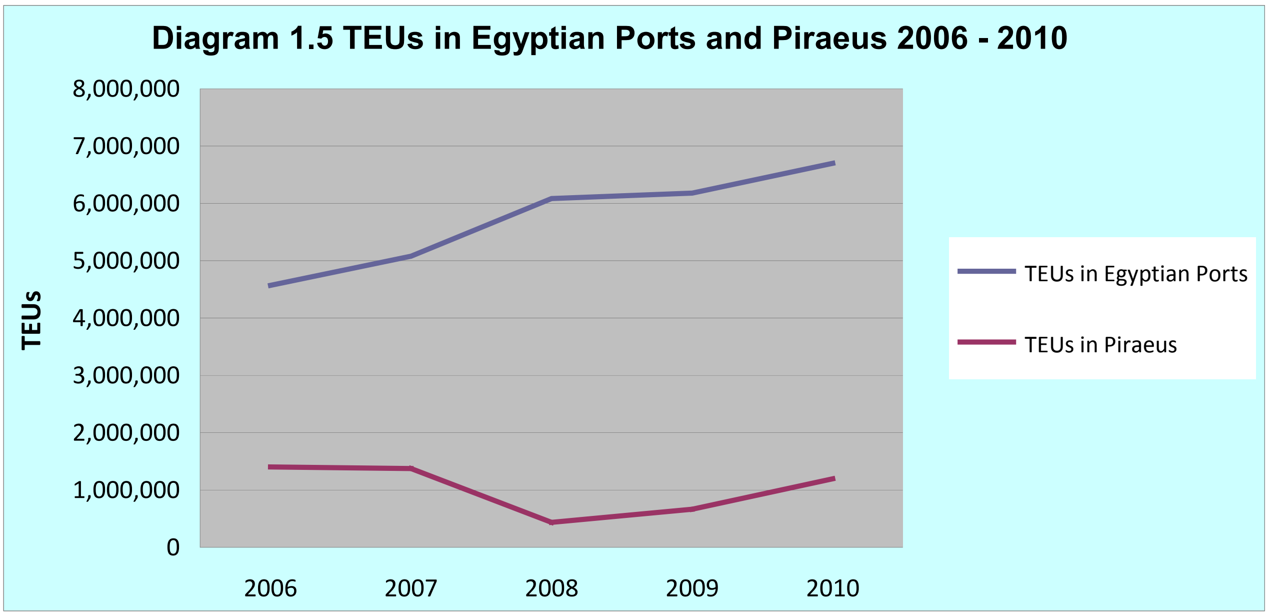


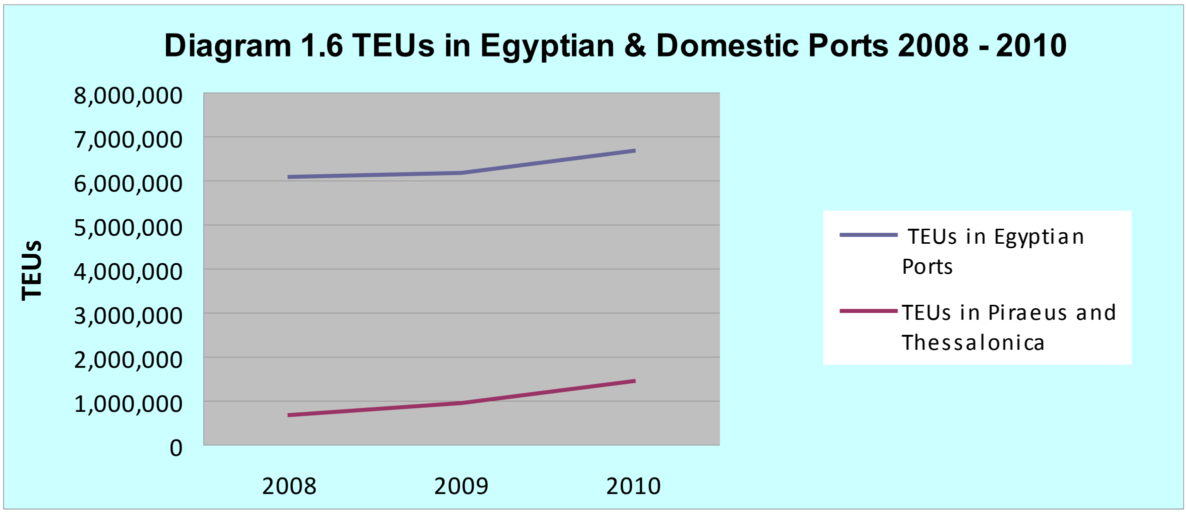
Moreover, the largest port in eastern Turkey (Mersin International Port) and one of the 100 best in the world (Containerization International, 2012) is situated in the city of Mersin. The average annual growth in terms of containers during the period 1984-2011 was 60%, while during 2008-2011, despite the financial crisis, the annual growth rate of the port stood at 6.5%. It is worth mentioning that only 5% of the port's activity is related to transshipment, which makes the Mersin Port not such a high competitor of Piraeus. However, its strategic location could turn into a key transfer station of Northern Iraq in the future.

The Egyptian ports of Alexandria, Damietta and in particular port of Said also stand out in container management. From 2006 to 2010 positive growth was achieved in terms of numbers of containers managed. In 2010 about 6.7 million TEUs were handled compared to 4,600,000 TEUs in 2006, achieving a growth rate of about 46.6%.

The largest share in this activity was held by the port of Port Said that retained a percentage of traffic 52.4% - 58.2% for the period 2006-2010 and 3.6 million TEUs in 2010 and 4.27 million in 2011. These volumes of the Egyptian container management activity came out to be highly important after comparing them with Piraeus port.

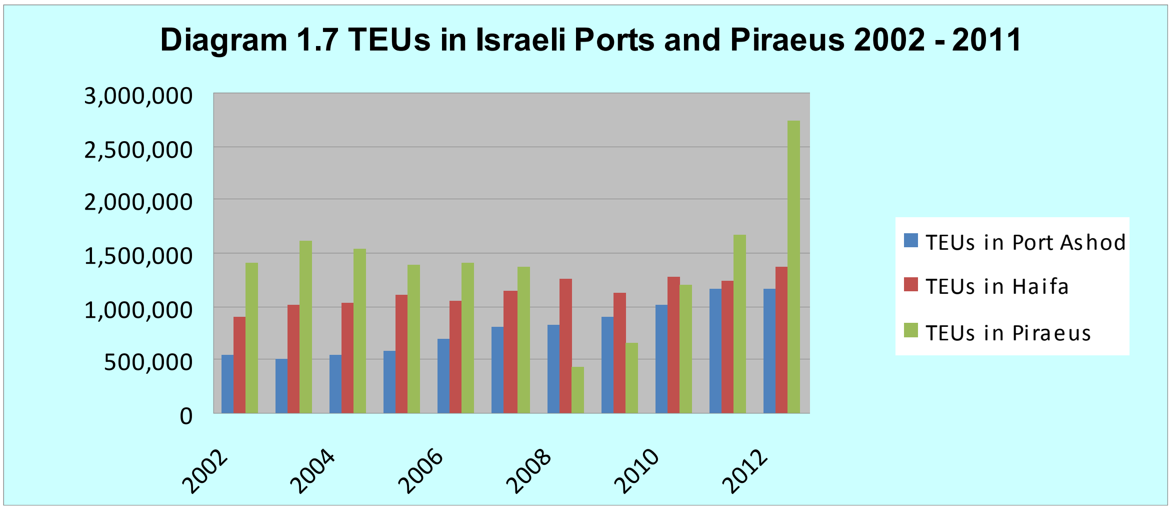
It is noted that in 2010, Piraeus managed only 18% of the number of total containers that were cumulatively managed by the Egyptian ports, while in 2011 Port Said continued to excel, whereas Piraeus handled just 40% of the volume of containers handled by the first port.



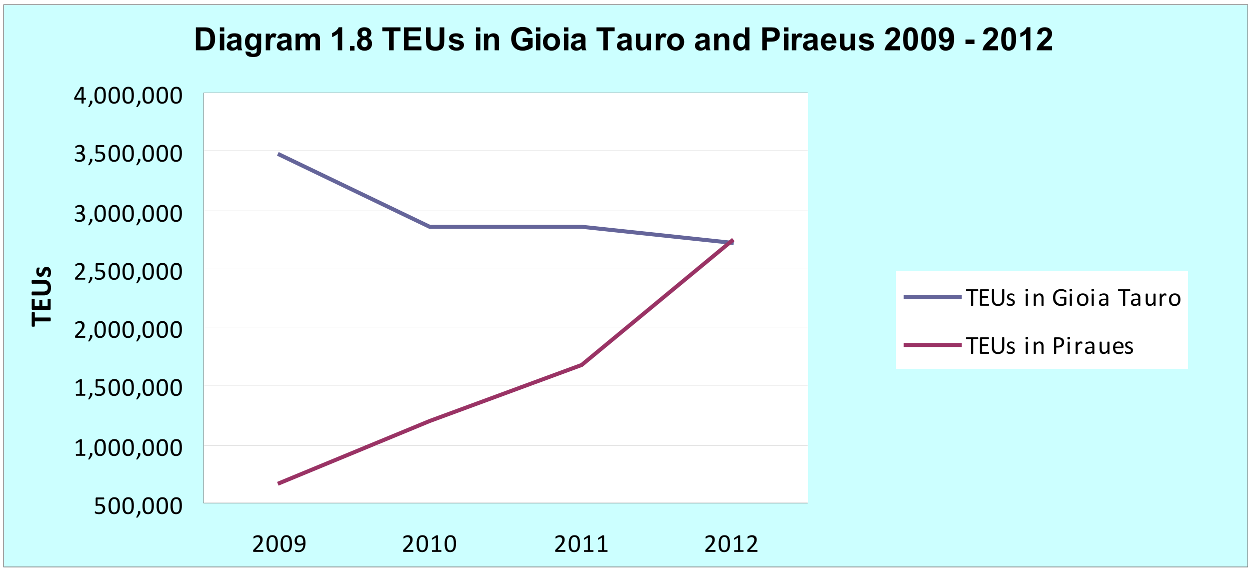


Of great interest is the fact that from 2010, 62% of the total volume of container handling in Egypt ports was for transshipment. 1.4 million TEUs were to be transported from and to European ports. The management of 44% of them served transshipment purposes. Based on the above we can conclude that Egypt ports can compete Piraeus especially in the transshipment sector.

Worth studying are also the transshipment ports of Israel and mainly that of Haifa and Port Ashdod that are among the greatest ports of Middle East. Despite the fact that Piraeus port presents a much higher volume of container handling than Haifa and Port Ashdod (exception is the 2007-2009 period in which Piraeus faced internal problems), Haifa is the basic “player” in the East Mediterranean trading. The new container terminal Carmel (2012) makes Haifa accessible to the largest container ships in the world, as well as the less bureaucratic port, increase Haifa’s competitiveness.



Furthermore, by setting the competition a little wider and leaving the East Mediterranean limits Italy's ports can be included as competitors of Piraeus. They handle a great number of containers and therefore rank among the top European ports. The most important ones are the Port of Genoa, Port of La Spezia and Port of Gioia Tauro. The last one is located in the middle of the most busy sea routes, the one connecting Suez and Gibraltar. In the chart below, it is presented the progress of Piraeus port (in terms of TEUs it handles) compared with that of Gioia Tauro for the period 2009 - 2012. Port of Gioia Tauro presented a continuous recession by losing a total of 22% of its dynamic. It should be mentioned that it is a transshipment port unlike Piraeus port, which is considered to be a port gate.



At this point the focus of this research paper shifts to the changes that took place in the trading ports during the last years. More specifically, nowadays the competition is not focused on the infrastructure of each port but on the services it provides. Such services could be information systems for effectively storing, loading, unloading and management of goods such as the quality control per package, repair or product assembly. All of the above introduce new conditions to which the trading ports have to adapt in order to survive from the strong competition. This often leads to vertical integration of firms handling marine container shipping, mergers and increased participation in the port management from the private sector. These characteristics could make the difference in the forthcoming years in the Carmel port for example which has less bureaucracy. Respectively, the privatization of Piraeus Port is a sign of adjustment to the new facts of the world reality made by the Greek side.

In global level, Piraeus port holds 0.46% of the market share for 2012. It is worth noting that the 10 biggest trading ports, in terms of TEUs handling, are located in Asia and 7 of them in China. The biggest one is Shanghai's port with 5.42% of market share (32.5 million TEUs) and the second biggest is the port of Singapore with 5.27% market share (31.6 million TEUs).

Table 1.6 World's Top Ports Market Share 2012 (with Piraeus)

A/A	Port	Country	TEU	Market share
1	Shanghai	China	32,529	5.42%
2	Singapore	Singapore	31,649	5.27%
3	Hong Kong	China	23,177	3.86%
4	Shenzhen	China	22,941	3.82%
5	Busan	South Korea	17,041	2.84%
6	Ningbo & Zhoushan	China	16,830	2.81%
7	Guangzhou	China	14,744	2.46%
8	Qingdao	China	14,500	2.42%
9	Dubai Ports	United Arab Emirates	13,280	2.21%
10	Tianjin	China	12,300	2.05%
11	Rotterdam	Netherlands	11,866	1.98%
	Piraeus	Greece	2,734	0.46%

UNIT: X 1000 TEU
Source: Port of Rotterdam, Port of Piraeus, NBG, AUEBS IFC estimation.

V. The consequences of the contract

Cosco's activity in Piraeus port has generated some benefits for O.L.P. and the society; however there have been some negative effects as well. To come to a conclusion about the effect of the investment, the situation before and after Cosco's arrival in the country is compared without using any hypothesis because it would go beyond the purpose of this study. More specifically:

a) All the investments that will be carried out at Pier 2 and 3 (buildings, machines, infrastructure etc) will be granted for free to O.L.P. at the expiration of the contract. The total budget, which compiled in 2009, is summarized below:

Description	Expenditure
Upgrade of pier 2 and 3. Building and other facilities	153,640,592 euro
Supply, installation, maintenance, upgrading and replacement of cargo handling equipment	456,585,783 euro
Supply and installation of information system and computers	10,072,000 euro
Total	**620,298,376 euro**

Until today more than 340 million euro have been invested with the use of Pier 3, while Cosco is willing to invest approximately 224 million euro in the western side of the port. The Greek public is going to receive a modern and a competitive European port in full function at the expiration of the contract.

b) Coscos's investments have already made Piraeus port one of the 10 biggest in Europe in container handling, while its target is to make it the biggest in Mediterranean and one of the 5 biggest in Europe. The benefit for Greece is the gradual recovery of the lost credibility and fame not only for the port itself but also for the whole country, which could attract new investors with multiple benefits for the economy and the society.

c) Exports of Greece have been increased. Cosco is the connection bridge between the Greek and the Chinese market. The latter one counts more than 1.3 billion customers whose income is continuously increasing. Exports are focused on the "unique Greek products" like wine, honey, marble, oil etc. For example the exported wine quantity to China grew by 200% reaching 600,000 ltr. Increased was also the quantity of the exported (olive) oil. Consequently, Greek products (started to) become known and acceptable in one of the most rapidly developing countries in the world.

d) A big percentage of containers that arrive at Piraeus are transferred to Central and East Europe through overland transport. As a result railway companies as well as companies which take advantage of road network can benefit from Piraeus Port development. Yet, it is also beneficial for the refueling sector. Under these conditions the refueling of the container ships is some 600 thousands mt per year generating more than 270 million euro revenue while the future looks prosperous given the growth of Piraeus Port capacity.

e) The contract with Cosco had an impact on the job market at the port. The fundamental difference between a public and private port operator is that the first places more emphasis on the social dimension of work while the second more emphasis - if not the only one - on the financial benefits. All the above had direct impact to the permanent jobs of both O.L.P. and P.C.T. Table 1.6 sums up from the financial statements of O.L.P and P.C.T. their permanent personnel.

Table 1.7 Permanent Employees

	OLP	PCT	TOTAL
2007	1,584	-	1,584
2008	1,655	-	1,655
2009	1,638	49	1,687
2010	1,386	225	1,611
2011	1,316	235	1,551
2012	1,250	254	1,504

Source: Port of Piraeus SA, Piraeus Container Terminal SA.

Taking into consideration the financial statements in the six year period 2007 - 2012, it is estimated that O.L.P employs seasonally 12 workers in average, while for P.C.T. these statistics are not available. P.C.T. increased the permanent staff by 10 in 2011 and by 19 in 2012 reaching a total of 254 employees. The total number of seasonal employees remains unknown. In any case, the number is far from the minimum of 1,000 employees that Cosco promised in 2008. It was estimated that an increase of the total income by 1.43 million euros leads to an increase of the permanent jobs by 1.

Overall, since 2009 the number of permanent personnel has been decreased due to voluntary retirement schemes and also as a consequence of the few new permanent jobs created by P.C.T. The total employees gross earnings in 2009 reached 71.5 million euros and in 2012 reached 53.2 million euros, decreased by 25.5%.

According to the National Bank of Greece, the increase in container handling along with the increase of the number of businesses operating today around the port of Piraeus (businesses that are directly connected with shipping e.g. shipping companies, cargo management, ship repairers, logistics etc.) will lead to an increase of GDP by 2.5% generating 125,000 new jobs.

f) Revenues that come from the contract: According to the contract O.L.P. received an initial payment of 50 million euro followed by five annual payments of 140 thousand euro and a variable payment which was defined as 21% of consolidated PCT revenue until 30/09/2017 and up to 24.5% of consolidated PCT revenue until the end of the contract (30/09/2044). The variable payment cannot be less than the guaranteed payment. The guaranteed payment increases each year. It started from 17.68 million euro and it will end at 166.83 million in 2044. Meanwhile, two standard payments will be paid. The following table presents O.L.P's total revenue including its revenue without all the previous mentioned payments.

Table 1.8 OLP REVENUE

	2005	2006	2007	2008	2009	2010	2011	2012
Revenue OLP (million euros)	109	110	131	73	83.5	70	58	64.5
--of which are from lease	0	0	0	0	16.7	26	29.4	31.9
Revenue OLP without annual payments	109	110	131	73	66.8	44	28.6	32.6

Source: Port of Piraeus SA

O.L.P.'s revenues without these payments appeared to increase from 2005 until 2007, reaching a top of 131 million euros in 2007. In 2008 they were reduced by 58 million euro (73 million euro). From 2009 its revenues decreased until 2012, a year of recovery. The reduced revenue is mainly explained by the grant part of its production activities to PCT A.C and secondly by the delay in the completion of Pier 1, which had to be completed until the first quarter of 2010. It is mentioned that Pier 1 had in 2012 completed two years of full operation.

As it can be seen from the above, the payments constituted the 22% of the total organization income in 2010 (26 million euro are the 37.14% of the total O.L.P income but only the 22.2% was from the annual payments and the rest came from fees paid by PCT for employing OLP's personnel), 28% in 2011 and 29.8% in 2012. Without the annual payments, revenue was decreased from 2009 until 2012. The revenue analysis is shown below.

Table 1.9 Income Structure OLP						
	2007		2008		2009	
Container handling	98,449,986.48	57.5%	47,366,875.97	40.8%	45,925,297.48	35.7%
Storage	32,476,128.41	19.0%	25,922,989.94	22.3%	20,844,417.40	16.2%
Various port services	40,428,736.85	23.6%	42,748,527.54	36.8%	44,987,535.71	35.0%
Revenue from standard and variable exchange	-		-		16,726,177.82	13.0%
Total revenue	**171,354,851.74**	**100%**	**116,038,393.45**	**100%**	**128,483,428.41**	**100%**
	2010		2011		2012	
Container handling	19,715,872.73	16.9%	25,080,480.67	23.9%	29,536,473.35	27.7%
Storage	5,869,747.06	5.0%	3,505,348.04	3.3%	3,045,597.50	2.9%
Various port services	46,792,568.28	40.1%	47,078,466.59	44.8%	42,030,232.79	39.4%
Revenue from standard and variable exchange	44,342,565.62	38.0%	29,463,393.19	28.0%	31,980,149.15	30.0%
Total revenue	**116,720,753.69**	**100%**	**105,127,688.49**	**100%**	**106,592,452.79**	**100%**
Source: Port of Piraeus SA						

From 2007 until 2010 OLP's container handling was diminished. In 2011, PCT's operation in the port benefited both the PCT and OLP and as a result the latter started to retrieve its lost share. The container storage sector was the one with the biggest decline. In 2008 it consituted 22.3% of the total revenue (26 million euro) while in 2012 only 3% (3 million euro). In 2010 OLP's total revenue decline is equal in absolute terms with the increase of the same service of PCT, but during the next years storage revenues have been declining in both companies. Finally, it is mentioned that in 2010 two subsidiaries were founded and operated by OLP named << Shipyard services limited company>> and <<Intermodal Transport Company and Logistics SA>>, which were of little importance because of their economic size and thus did not publish consolidated financial statements.

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