

## THE COMPETITIVENESS OF PORT SAID PORT TRANSHIPMENT OF CONTAINER TRADE VIS-À-VIS MEDITERRANEAN REGION AND THE WORLD

MOHAMED NABIL ELNABAWY & MOHAMED HUSSEIN NASSAR HASSAN

Arab Academy for Science, Technology & Maritime Transport, Egypt

### ABSTRACT

Traditionally marine transportation was separated from the importance of the transportation supply chain logistics network, but in the early 2000s became a very important aspect of the entire logistics chain operation, i.e. an integral part of the bigger picture logistics and supply chain operation. Accordingly, the port was transformed from a monopolistic market to a competitive market which inherently forces the ports to compete to offer some profitable services for instant the transshipment of container trade and that carries the burdens of additional services for improvement at ports so that they can compete.

The rapid growth of seaborne trade, container traffic keeps growing parallel with the increasing of ships size; therefore it became not economically feasible to ships to load and discharge in multiple ports. Hence, some of the ports began to grow until it became what is known as hub ports. This led to the development of new types of special container transshipment port, where the transshipment define as the act of shipping goods to an intermediate destination prior to reaching their ultimate end-use. Transshipment is a common practice with logistic benefits, but can be used to illegitimately to disguise the country of origin or intent of the Goods ("How to Import into the US," 2007).

The world transshipment trade is divided into nine main regions almost covering the entire world (Russo & Musolino, 2013). Our study will focus on the competitiveness of the main hub ports in the Mediterranean region where the Mediterranean`s location connecting the trade between the Middle East, Asia and Africa – and for some vessels, even USA east coast-means that regions hosts a great number of transshipment ports, a large numbers of ships calling in the Mediterranean are on the route to ports not necessarily to be their final destination for unloaded the cargo (Lloyd`s List, 2015), vis-à-vis port of Port Said whereas the port recorded a significant growth at the last years in parallel with the growth of transshipment trade in mega hubs in the Mediterranean region whereas recorded strong growth in container traffic in the recent years, recording growth well above the market average (Lloyd`s List, 2014) but at same time port Said port still so far from the Global competition.

Our study will use SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis for understanding the weaknesses and strengths to identifying both opportunities and threats and analyse the logistics and marketing factors influencing the growth of Port Said port in order to make recommendations on how to maintain high rates of growth and to be a global leader as integrated logistics hub in the presence of competitive market in transshipment of container trade.

**KEYWORDS:** Competitiveness, Container

## INTRODUCTION

### Brief History of Development of Transshipment Ports

Transshipment of cargo was always required for shipping and ports for general cargo prior to containerization in the early 1970s were invariably gateway ports providing access to their hinterlands.

Increasing size was a result of containerization of general cargo with lower unit costs to be loaded and unloaded fast in ports equipped for that purpose. Increasing the size of container ships with presence of containers needed to be transhipped, lead to the division of the types of ships between smaller vessels and barges in order to serve shallow ports unable to accommodate the large ships and to collect and distribute small numbers of containers. The concept of feeder ports evolved in that manner (Part 3: Transshipment, 2011).

Initially those ports were gateway ports with stacking space for the transshipment of the feeder containers. Port Said is an example of such a port where the port expand to the opposite side of Suez Canal bank and this became known as the east of port said port specialist on handling container. Congestion and delays resulting from the intermingling of transshipments with imports and exports and the consequent competition for stacking space motivated the idea of moving transshipment traffic to offshore terminals or ports that could be dedicated for that purpose. Such ports then grew into global hubs for large liners, with spokes of services by smaller liners of different sizes to and from lesser ports. Hub ports were (and now are) selected by liner companies with regard inter alia to geographic location, logistics of services, depth of water, capacity, infrastructure and superstructure, efficiency and financial arrangements (as the liner companies often participate in financing the investment in hub ports (Part 3: Transshipment, 2011).

### Port of Port Said Characteristics

The port of Port Said is one of the most important ports in Egypt locating in Mediterranean side because of geographical site on the eastern entrance of the Suez canal, and also on the entrance of the biggest global navigational channel (the Suez Canal) connecting Europe, east of north America and north Africa with the East and also considered biggest crossing traffic port in the world blues it is the gate way for local Egyptian cargo.

The port is bordered by an illusory line seawards reaching as from the end of the western barrier of Suez Canal channel until the end of the Eastern barrier of the canal from the sea side. Whereas southwards an illusory line extends from the end of the Link channel reaching to Eastern side of the Suez Canal

**Table 1**

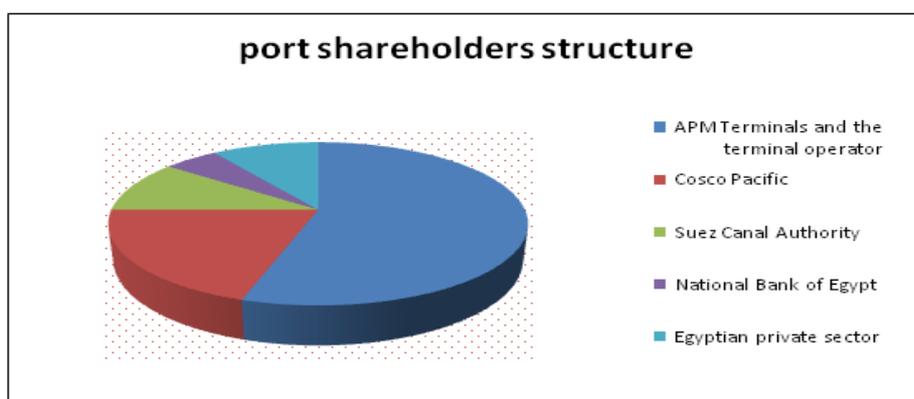
	Phase I Phase I+II	
No. of Cranes	12 Super Post Panamax Cranes	24 Super Post Panamax Cranes
Quay Length	1,200 m	2,400 m
Draft	14.5 m	16 m
Terminal Capacity	2.7 million TEU	5.4 million TEU
Terminal Area	600,000 sqm	1,200,00 sqm
Reefers Plugs	1,716 plugs	2,300 - 2,500 plugs

**Source:** ("Port Said Port Authorities," n.d.).



Source: ("Port Said Port Authorities," n.d.).

Figure 1: East Port Said Container Terminal



Source: ("Port Said Port Authorities," n.d.).

Figure 1: Port of Port Said Shareholders Structure in 2013

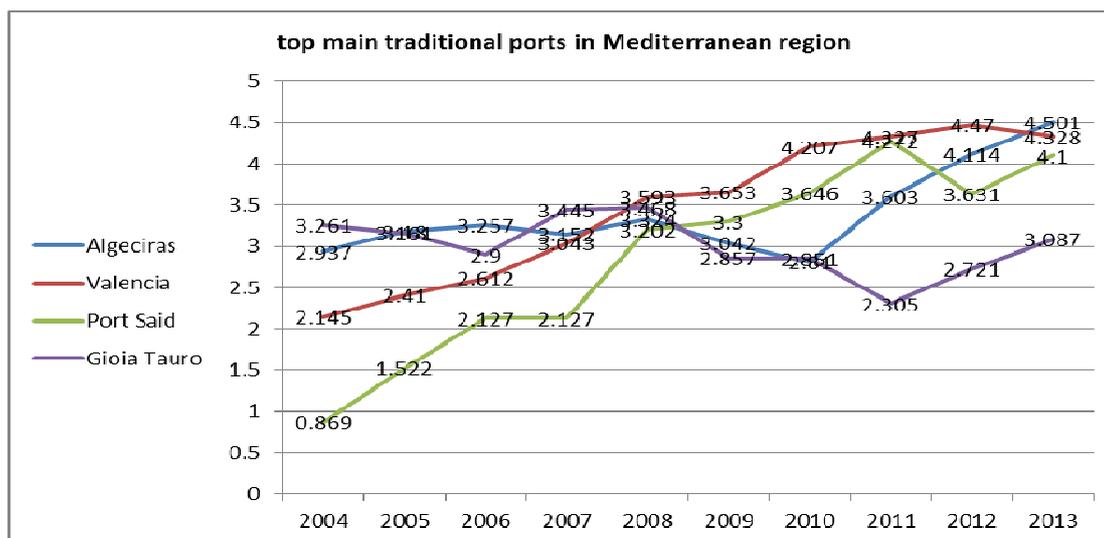
### PORT SAID PORT TRANSHIPMENT TRADE VIS-A-VIA MEDITERRANEAN REGION

The seven 10 top Mediterranean box ports that recorded positive growth in a year 2013 focused their business around transhipment trade and it is expected that the high rate of growth will continue in the coming years by 10% (Lloyd's List, 2014).

Table 2: Mediterranean Ports (Throughput) Excluding the New Players Old Players

year	Algeiras Teus Handled By Millions	Valencia Teus Handled By Millions	Port Said Teus Handled By Millions	Gioia Tauro Teus Handled By Millions
2004	2.937	2.145	0.869	3.261
2005	3.180	2.410	1.522	3.161
2006	3.257	2.612	2.127	2.900
2007	3.152	3.043	2.127	3.445
2008	3.324	3.593	3.202	3.468
2009	3.042	3.653	3.300	2.857
2010	2.810	4.207	3.646	2.851
2011	3.603	4.327	4.272	2.305
2012	4.114	4.470	3.631	2.721
2013	4.501	4.328	4.100	3.087
<b>Total</b>	<b>33,92</b>	<b>34,788</b>	<b>28.788</b>	<b>30.056</b>
<b>Percentage change in 10 years</b>	<b>53%</b>	<b>101.8%</b>	<b>471.7%</b>	<b>-5.3%</b>

Source of Handling Container Volume: Lloyd's List and Port Industry Statistics.



Source of Handling Container Volume: Lloyd's List and Port Industry Statistics

Figure 2: The Graph Showing the Evolution of Containers Handled in Mediterranean Region

Table 3: Top 10 Mediterranean Ports (Throughput) Including New and Old Players

Regional Ranking	Ports	Throughput 2013 (Teu)	Throughput 2012 (Teu)	Annual % Change
1	Algeciras	4,500,600	4,114,231	9.4%
2	Valencia	4,327,838	4,469,754	-3.2%
3	Port Said	4,100,000	3,631,165	12.9%
4	Ambarli	3,378,000	3,097,464	9.1%
5	Piraeus	3,163,755	2,734,014	15.7%
6	Gioia Tauro	3,087,000	2,721,104	13.4%
7	Maarsaxlokk	2,750,000	2,540,000	8.3%
8	Tanger Med	2,558,426	1,826,313	40.1%
9	Genoa	1,988,013	2,064,806	-3.7%
10	Barcelona	1,720,383	1,758,647	-2.2%
<b>Total</b>		<b>31,574,015</b>	<b>28,957,498</b>	<b>9%</b>
<b>Port Said %share form the total trade in the region</b>		<b>13%</b>	<b>12.5%</b>	

Source: Lloyd's List

From the above table noted that the volume of containers handled in port of Port Said was always growing faster than the old traditional ports in the region except in a year 2012 due the security and political unrest that occurred in this year in Egypt as stated in the report of World Bank 2012, despite the entry of new players in Mediterranean region at recent few years as instant Tanger Med port which was able to achieve the highest growth rate in Mediterranean region 2012/2013 and this due to the advantages that the port possess as of the strategic location on the strait of Gibraltar into the entrance of the Mediterranean sea from the western side and that makes the ships does not need to deviate from the rout as some of the other ports in the region such as Valencia and Barcelona and cheap labour port of port said was always able to compete and gets large share of the market in the region in addition from the total numbers of containers handled by the biggest 10 ports in Mediterranean region less than what Singapore port handled independently at the same year and that gives indication that the transshipment of containers trade in region still so far from the global competition.

## PORT SAID PORT TRANSHIPMENT TRADE VIS-À-VIS THE WORLD

Researcher previously analyzed that the Port Said port was able to compete with in the region but still so far from the global competition where Port Said world rank 2009 for handling container is 34 and 36 in increasing ratio between 2009 and 2013 where the port share among the world is 0.6% despite the advantages that the port possess.

## IDENTIFYING THE FACTORS INFLUENCING THE TRANSHIPMENT TRADE IN PORT SAID PORT

### Summary Indexes for Egypt

- Logistics Performance Index (LPI) 2014 Ranke 62 with score 2.97.
- Agility Emerging Markets Logistics Index 2015 Ranke was 32 declined four ranks from 2013.
- GDB (Gross Domestic Product)percentage change from previous years according to World Bank report in 2012 2.2%, 2013 2.1, 2014 2.2%, 2015and expected to be 3.5% at 2015 where the GDP for capita is 3228US dollar and rank is 99 where the GDP as share in the world is 0.6% with rank 27.
- Corruption Perceptions Index (CPI) 2012 Ranked 112 improved at 2014 to Ranke 94.
- The Global Competitiveness Index (GCI) 2103 – 2014 Ranked 118 and declined at 2014 – 2015 to Ranke 119.

The researcher noted that most of Egyptian indexes have declined in the recent years except the CPI, LBI and the GDB percentage which recorded a positive improvement, from the researcher`s point of view the improvement has had a positive impact on the growth of the port of Port Said.

### Suez Canal Traffic

**Table 4: No of TEU's By Ship Status Transited Suez Canal**

Year	Laden	Ballast	Total
2000	12,109,374	1,922,349	14,031,723
2001	12,331,156	1,820,251	14,151,407
2002	13,779,935	2,111,116	15,891,051
2003	15,937,527	2,948,329	18,885,856
2004	18,591,937	3,738,330	22,330,267
2005	20,567,661	4,689,745	25,257,406
2006	22,915,716	5,636,892	28,552,608
2007	26,301,928	7,838,735	34,140,663
2008	27,772,184	8,073,246	35,845,430
2009	24,746,307	5,023,627	29,769,934
2010	29,589,864	7,184,913	36,774,777
2011	31,653,579	6,988,327	38,641,906
2012	31,601,291	6,115,979	37,717,270
2013	32,270,166	5,892,106	38,162,272
2014	34,958,839	7,106,001	42,064,840
<b>Total % Change in In the Last 14 Years</b>			<b>199.8%</b>

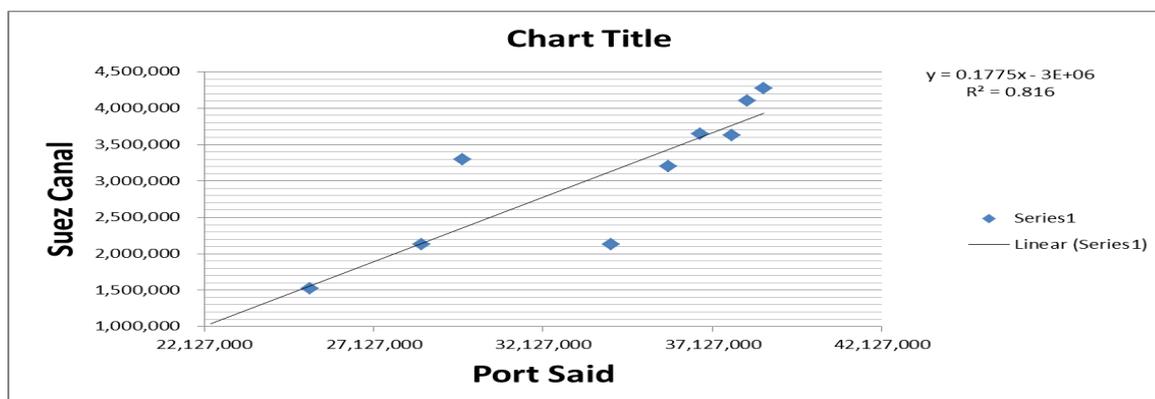
Source: Suez Canal Authority

**Table 5: No of TEU's By Ship Status Transited Suez Canal Vis-À-Vis Volume of Containers Handled in Port Said Port**

Year	Suez Canal	Port Said
2004	22,330,267	0.869,000
2005	25,257,406	1.522,000
2006	28,552,608	2.127,000
2007	34,140,663	2.127,000
2008	35,845,430	3.202,000
2009	29,769,934	3.300,000
2010	36,774,777	3.646,000
2011	38,641,906	4.272,000
2012	37,717,270	3.631,000
2013	38,162,272	4.100,000
<b>Total % Change</b>	<b>70.9%</b>	<b>471.7%</b>
<b>Port said share % from SC traffic</b>		<b>10.7%</b>

Source: Suez Canal Authority and Lloyd's List

The figures highlighted by red are the fallen years



**Figure 4: The Correlation between the Noh of TEU'S by Ships Status Transited Suez Canal Vis-A-Via Volume of Containers Handled in Port Said**

From the regression analysis, the researcher found that there is strong a positive correlation for the containers handled in Port Said port and the density of traffic in the Suez Canal.

In addition, from the researcher point of view of the Port Said port share of the containers transited the Suez Canal very modest.

#### Logistics Performance Index (LPI)

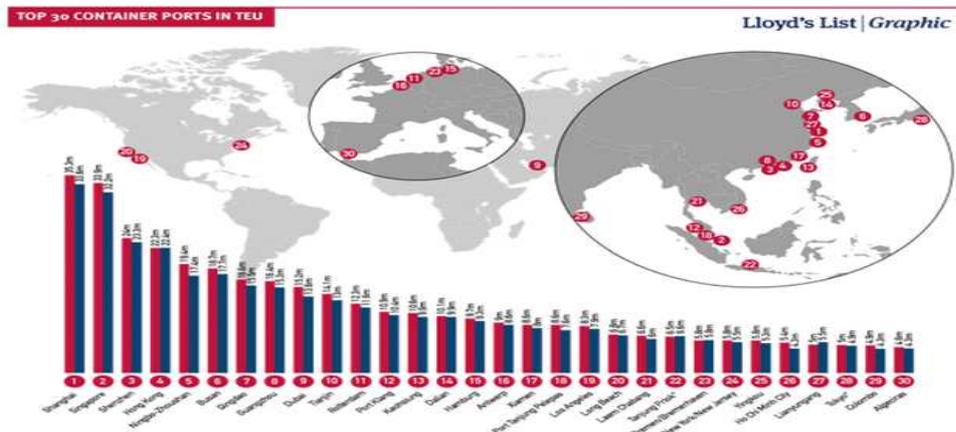
**Table 6: Containers Traffic in Contrast the Egyptian Logistics Performance Index**

Year	LPI		Container Handled TEUs
	Rank	Score	
2007	100	2.37	2,127,000
2010	95	2.61	3,646,000
2012	60	2.98	3,631,000
2014	62	2.97	N/A

Source of Handling Container Volume: Lloyd's List

Form the table above researcher found that there is a marked improvement for Egypt in the LPI between year 2007 and 2012 by 36 ranks but later declined 2 ranks in 2014 with almost steady score in 2014 where the Index recorded 2.97 instead of 2.98 in addition researcher found a huge increase in container handling between 2007 to 2010 by 71.4% parallel with the increase of Egyptian score in LPI by 10.1%, despite the improvement for Egyptian LPI between 2010 and 2012 by 14,2% found that the container handling rate has slightly declined due to the security and political unrest that occurred in this year in Egypt as stated in the report of world bank 2012 then came back to rise again in 2013 by 12,9% with the relative improvement in domestic situation for Egypt.

LPI results across four editions (2007, 2010, 2012, and 2014) for Egypt were ranked 63 with score 2.88. The factors on which the report rating Egypt was customs, infrastructure, international shipments, logistics quality and time line all of which possess a common factor, but low ranking comparing with the countries which have the most successful ports for transhipment of containers trade.



Source: Lloyd’s List

Figure 5: Top 30 Port for Handling Containers 2014

Table 7: The Countries Which Have the Highest Transhipment Ports in the World on LPI

country	LPI 2014	
	Rank	Score
Singapore	5	4.00
Hong Kong	15	3.83
Taiwan, china	19	3.72
Korea	21	3.67
United Arab Emirates	27	3.54
China	28	3.53
Egypt	62	2.97

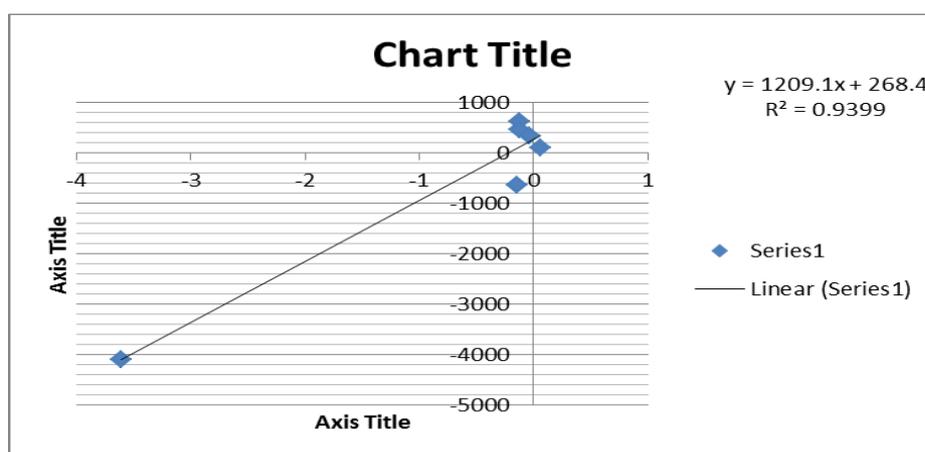
From the table above researcher point of view that the LPI is a good indicator to identify the problems that hinder the flourishing of Port Said port as a logistic hub.

## The Global Competitiveness Index (GCI)

**Table 8: Comparing the Volume of Handling Containers in Port Said Port with the Egyptian Performance in GCI**

Year	GCI		Container Handled TEUs
	Rank	Score	
2008	81	3.98	3,202,000
2009	70	4.04	3,300,000
2010	81	4.0	3,646,000
2011	94	3.88	4,272,000
2012	107	3.73	3,631,000
2013	118	3.61	4,100,000

Source of handling container volume: Lloyd's List and Port Industry Statistics.



**Figure 6: Correlation between the Volumes of Containers Handled in Port Said Port Vis-À-Vis the Egyptian GCI**

From the above table and the regression analysis noted that there is negative correlation between the GCI and the volume of containers handled between 2008 and 2013. Despite the large increasing in the volume of containers handled in the port of Port Said in contrast found that the GBI score and rank are declined where GCI reports explained in the recent years the most important reasons for that sharp decline in GCI rank and score was due to the lack of political and security stability, from this point the researcher point of view the reasons for that continuous increase due to the following reasons:

- There is no record for any incident disturbs the security in any Egyptian port including the port of Port Said.
- On the top of the shareholders for Port Said terminal international companies have a great name in shipping industry.
- The ability of the port to receive the giant container ships.
- The large increase in transshipment of containers trade in the Mediterranean region by 10% average in last recent years.
- The strategic location, which is possessed by port of Port Said.
- The GCI survey when evaluated the infrastructure doesn't distinguish between the infrastructure used for transshipment of containers and the infrastructure for the all country.

For the above mentioned reasons the researcher’s point of view the port of Port Said possess enough factors of power to make it continue growing despite the numerous weaknesses that negatively influenced the port. That does not mean there is no correlation between the volume of containers handled in Port Said port and the GCI assessment.

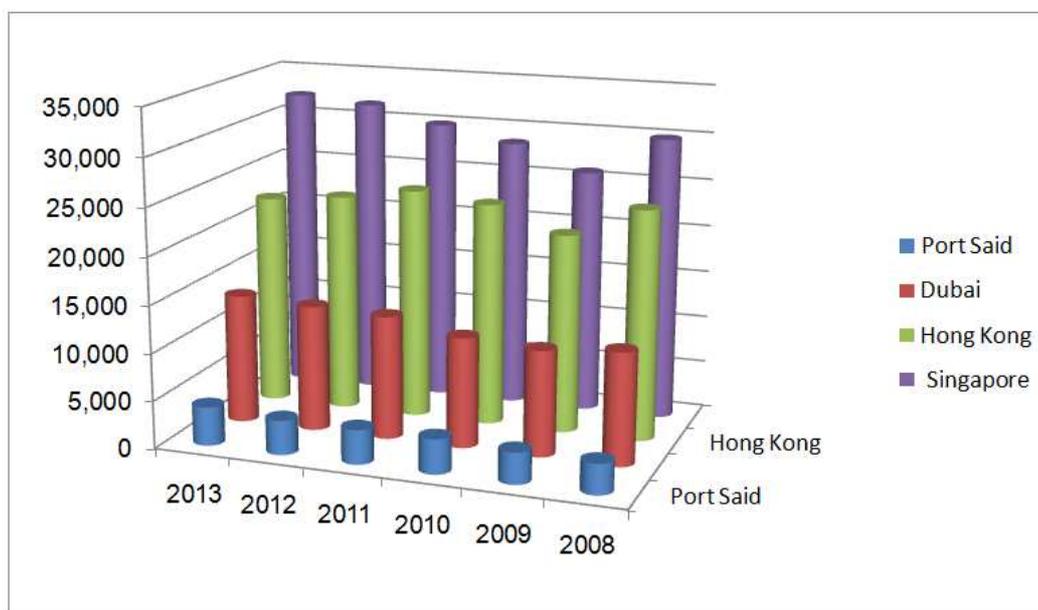
The researcher will clarify this point in the following tables by choosing sample for the most successful ports for transshipment of containers trade in the world which are Singapore, Hong Kong and Dubai (UAE) where the share percentage among the world total of containers handled at 2013 respectively is 5%, 3.4% and 2.1% in contrast with the GCI assessments and Port Said port where the share percentage among the world total of containers handled for the same year was 0.6%.

**Table 9: Containers Traffic (in Thousand 1000 TEU’S) In Vis-À-Vis GCI Performance**

Ports	GCI 2013		2013	2014	2015	2010	2009	2008
	Rank	Score						
Singapore	2	5.76	32,240	31,649	29,937	28,431	25,866	29,918
Hong Kong	7	5.41	22,352	23,117	24,384	23,532	20,983	24,248
Dubai(UAE)	19	5.07	13,641	13,270	13,000	11,600	11,124	11,827
Port said (EGP)	118	3.61	4,100	3,631	4,272	3,646	3,300	3,202

Source: (International Association of port and harbors, 2014)

Form the table above noted that the chosen three ports are belonged to highly competitive countries on the GCI compared with Egypt which possess the rank 118 at 2013 119 at 2014 and that lead to the fact that Egypt have a lot of work to do.



**Figure 3: Graph Showing the Differences of the Volume for Handling Containers**

From researcher’s point of view if the government intend intends to work on the development of Port Said port they should take into account the points on which the rating particularly associated especially the points those considered as the most problematic factors as listed in GCI report for doing business and significantly connected with the marine

industry such as policy instable, government instability, access to financing, foreign currency regulations, corruption, tax rates, poor work ethic in national labour force, crime and theft government instability/coups and poor public health which will lead to the fact that the investment environment in Egypt will not be attractive to the investors unless there is a real reforms. From this point, the Port Said port will be able to compete globally and will be eligible to take a share of the Asian market due to the strategic location, that possessed by proximity to the consumer market.

## STRATEGIES AND RECOMMENDATIONS TO ENHANCE PORT SAID'S COMPETITIVENESS AS A LOGISTICS HUB

### SWOT Analysis of Port Said port Transport & Logistics Industry

Table 10

Weaknesses	Strengths
<ul style="list-style-type: none"> <li>• With universal aspirations only a few global players.</li> <li>• Unstable social, economic and politics.</li> <li>• Poor Labour market efficiency.</li> <li>• Weak physical infrastructure.</li> <li>• Poor macroeconomic environment.</li> <li>• High level of corruption.</li> <li>• Poor IT logistics.</li> <li>• Restrictions for capital flow.</li> <li>• Foreign currency regulations.</li> <li>• Poor work ethic in national labour force.</li> <li>• The level of higher education and training is low.</li> </ul>	<ul style="list-style-type: none"> <li>• Cheap labour comparing with the wages scale in the region.</li> <li>• Availability of land for future extension.</li> <li>• Strategic location.</li> <li>• Large domestic market size.</li> <li>• Deep draft.</li> <li>• Welcoming tax structure.</li> </ul>
Threats	Opportunities
<ul style="list-style-type: none"> <li>• Transfer of trade and distribution bases to new regional hubs.</li> <li>• Increase of piracy at Arabian Sea will lead to reduction of traffic in Port Said port.</li> <li>• Serious steps by other countries in Mediterranean region to improve the logistics and marketing services for their ports to be logistic hubs and strong competitors for Port Said port.</li> <li>• Oil price is one of the major factors for calculating the voyage cost, as cheap oil price may lead the shipping lines to use alternative route which is the Cape route which will lead to reduction in Suez Canal traffic.</li> </ul>	<ul style="list-style-type: none"> <li>• Strong growth expected in logistics in Mediterranean region.</li> <li>• Strong growth expected for transshipment of container trade in Mediterranean region.</li> <li>• Deepening Suez Canal will give advantage to the port to be able to handle 8<sup>th</sup> generation container ships.</li> <li>• The movement of the higher growth rates from the Far East to South East Asia will increase the chance of Port Said port to get a larger share of the market due to the preferable route via Suez Canal due to the shorter distance in contrast Panama Canal.</li> </ul>

### Data Collections

In SWOT analysis, the researcher identified the strengths, weaknesses, opportunities and threats factors according to several international and domestic reports including Logistics Performance Index (LPI), Agility Emerging Markets Logistics Index report, Corruption Perceptions Index, Egyptian maritime authority reports and Lloyd's list reports

In addition from the above SWOT analysis, this author would like to share his personal observations obtained from a field study in Singapore at the port of Singapore which is the most successful container transshipment hub in the world. This author was exposed to the strategies and management of the Singapore port through the Maritime Port

Authority (MPA) Singapore and the single port operator Port of Singapore Authority (PSA). To clarify, PSA is not the port authority, but a commercial port operator company. PSA is also the world biggest operator for handling containers, 65 million TEU for 2014. From what this author observed from PSA and MPA, some of the recommendations which follow are based on the observations.

## LOGISTICS INDUSTRY

The world ratio of trade to GDP as a whole has increased from 39% in 1990 to 59% in 2011. And today the total value of global trade exceeds 20 trillion US dollar. Logistics is a key part of the “plumbing” of the global trading system. Logistic services are one of the major factors that attract investors and good indicator for investment decisions of companies large and small (Global Agenda Council on Logistics & Supply Chain Systems 2012-2014, 2013). Therefore required from the Egyptian government and port authorities to improve the logistic services and use marketing strategy for the recovery of transshipment of container trade in Port Said port and this comes through the following:

## CONCLUSIONS

This paper offers a study of transshipment in Port Said port in order to maintain high rates of growth and to be a global leader as integrated logistics hub in the presence of a competitive market in transshipment of container trade. Competitiveness is putting huge burdens to improve your logistics services in order to increase the revenue, to achieve this target the government and port authority should work in a harmonization and integration system because this problems and obstacles which limit the recovery of transshipment container such as infrastructures, security, education and training, the flow of information, corruption, shipment and logistic services will not be resolved if the maritime industry departments work as a separate islands.

In addition, the political instability where the biggest declined at 2012 does not happened because of the economic crisis 2008/2009 but because of the political instability situation as declared at international bank report it's the largest influential negative factor for increasing the competitiveness of Egypt, therefore if the Egyptian government are willing to increase the revenue of transshipment containers they should work hard to cover the all weaknesses and be more attractive for the shipping lines and the investors, this is a logical consequences for the globalization there is no geopolitical boundaries any more.

Port Said Port possess strength factors which make it eligible to play bigger role as a mega hub port for the containers transshipment such as the strategic location on the north entrance of Suez canal, capacity of the port, cheap labours and the availability of land for future extension and where there is opportunity to get a bigger share of the market with the high growth of sea port trade between the South East Asia and Europe but to have a big port does not mean the success without an integrated work between the government and non-governmental agencies to develop a long-term plan for the marketing of the port said port as integrated logistic hub.

## RECOMMENDATIONS

### Port Said Port Authority Role

- Port managers should use the updated technology tools for loading and discharging.
- One of the most important factors that the port authority should take into account is the manpower; they should be

trained continuously to improve their performance which will reflect on the port performance.

- Port managers should build a good reputation by reducing time delay in the port.
- With the cheap labours and the high value of the US dollars the port should offer a competitive price comparing with other ports in the region.
- Due to the strategic location, that possessed by proximity to the consumer markets in Europe, Middle East and East Africa the port authority should make marketing for Port Said as a distribution centre which is.
- Port Authority should build strong cooperative relationship with customers and build new alliances with the shipping lines.
- Port should maintain a strong connection with the other ports around the world to build a data base.

### **Egyptian Government Role**

- **Infrastructure**
  - Government must continue to expand the size of the port in order to increase the maximum capacity of the port to follow up the rapid growth of transshipment of container trade especially as there will be no problem with the land available in the port vicinity.
  - Continue deepening the draft of the port to follow up the rapid increase of the ships sizes.
  - The nearest international airport located in the capital (Cairo) 207km from the port, although there is an airport in port said city but its national airport therefore it is required to develop the port said airport .
  - The nearest bridge or tunnel connecting the east bank of the Suez Canal with the west bank located distance more than 50km therefore it is recommended to build a tunnel or bridge more closely.
  - Connecting the railway net with the port will improve the multi modal connectivity.
- Logistic services, one of the most attractive factors for the ships is the availability of services such as spare parts, technicians, provisions, bunkering and ease of signing on and off for the ship's crew therefore it is recommended to allow the international respectable logistics companies to work in Egypt and facilitate the ship's crew signing on and off.
- IT, one of the most important factors that distinguish the fourth generation of ports, IT consider as a centre of supply chain management (SCM). The key to attaining operational quality in global supply chains is to ensure that effective physical flow of goods is perfected by adept information flows. We propose positioning Port Said port as the preferred regional / global IT for Logistics Nerve Centre. The main strategy is to develop an end-to-end service model as an integrating framework and would address both the 'hard' and 'soft' aspects (Working Group on Logistics, 2002).
- Government should evaluate the performance of the agents and freight forward companies and stop the work permit to the companies which do not achieve the standard in order to enforce them to follow the global stander.
- Secured hub, security is one of the most annoying factors for the Egyptian marine industry as declared by

international bank in the recent years. The researcher recommends that the Egyptian government should work hard to improve the security environment as a general in Egypt and in marine sector by using the advanced technology capabilities and built a reputation for having strict security measures, Port Said port should be known for the shipping industry as a secured logistic hub. In addition, it is not practical for the security to do a physical inspection for each single container that will reflect negatively on the port performance. As such, a critical element in the success of the cargo security is the availability of advanced information to effectively flag out high-risk containers for inspection. The ability to exchange import / export data, then analyse that data through the various methods of electronic risk assessment prior to containers being transported, will help ensure the earliest possible detection of high-risk containers and allow countries to take appropriate measures on such shipments. If port Said port is able to put in place the essential security measures and by securing preferential access / clearance to the major trading nations for shipments going through our ports, Port Said port will be more attractive for shippers to base their operations in Port Said port and capture more transhipment cargo (Working Group on Logistics, 2002).

- Education, government should give strong priority for education, the higher education and training will lead to workforce skilled enough to change the business environment in Egypt by having the ability to deal with high technology and business sophistication.

In addition, the government should focuses on maritime business education.

- Suez Canal authority must always maintain attractive fees for the shipping lines.

## REFERENCES

1. Alderton, P. (2008). *Port management and operations* (Third ed.). London: LLP. Retrieved from <https://books.google.se>.
2. Tae-Woo Lee, Paul, and Matthew Flynn. "Charting a New Paradigm of Container Hub Port Development Policy: The Asian Doctrine." *Transport Reviews* 31.6 (2011): 791-806. Web. 19 Mar. 2015.
3. Working Group on Logistics. (2002). Developing Singapore into a global integrated logistics hub. Retrieved March 20, 2015, from <http://www.mti.gov.sg/ResearchRoom/Pages/Reports-of-the-Economic-Review-Committee.aspx>.
4. International Association of port and harbors. (2014). World Container Traffic Data 2014. Retrieved from <http://www.iaphworldports.org/LinkClick.aspx?fileticket=A7oMk7mR0a4%3d&tabid=4879>.
5. TEU trough SC by ship status. (2015). Retrieved from <http://www.suezcanal.gov.eg/>
6. Working Group on Logistics. (2002). Developing Singapore into a global integrated logistics hub. Retrieved March 20, 2015, from <http://www.mti.gov.sg/ResearchRoom/Pages/Reports-of-the-Economic-Review-Committee.aspx>
7. Panayides, P. M., & Song, D. (2012). *Maritime Logistics : Contemporary Issues*. Bingley, U.K.: Emerald Book Serials and Monographs. Retrieved March 18, 2015.

8. Tae-Woo Lee, Paul, and Matthew Flynn. "Charting a New Paradigm of Container Hub Port Development Policy: The Asian Doctrine." *Transport Reviews* 31.6 (2011): 791-806. Web. 19 Mar. 2015.
9. Alderton, P. (2008). *Port management and operations* (Third ed.). London: LLP. Retrieved from <https://books.google.se>.
10. Notteboom, T. (2011). *Current issues in shipping, ports and logistics*. Antwerp: UPA University Press Antwerp.
11. How to Import into the US. (2007, November 12). Retrieved from <http://www.itintl.com/what-is-transshipment.html>
12. Russo, F., & Musolino, G. (2013, January). Geographic Factors Affecting the Presence of Transshipment Services in Regional Maritime Container Markets. *Geographical Analysis*, 45(1), 90-102. doi:10.1111/gean.12003
13. Lloyd`s List. (2014, November 18). Mediterranean mega hubs continue to reap the rewards. Retrieved March 12, 2015, from <http://www.lloydlist.com/ll/sector/containers/article452289.ece>
14. Kovačević, B. (2014, December 02). Maritime Ports Logistics. *Nase More*, 61, 131-133. Retrieved March 22, 2015
15. Liod`s List. (2015, February 05). Data Hub: Trade Routes. Retrieved March 13, 2015, from <http://www.lloydlist.com/ll/sector/containers/article456433.ece>
16. (2011). *PART 3: TRANSHIPMENTS*, 3-5. Retrieved from [http://www.transport.gov.za/Portals/0/Maritime/Part%203\\_Final\\_280711yf.pdf](http://www.transport.gov.za/Portals/0/Maritime/Part%203_Final_280711yf.pdf)
17. Port Said Port Authorities. (n.d.). Retrieved March 14, 2015, from <http://www.mts.gov.eg/en/content/28/1-105-Port-Said-Port-Authority>
18. Port Industry Statistics. (n.d.). Retrieved March 18, 2015, from <http://www.aapa-ports.org/Industry/content.cfm?ItemNumber=900>